Yahoo Group Archive: mmr40owngrp

Yahoo Group summary: MMR-40 owners group

These Yahoo Groups messages were archived in WARC format by ArchiveTeam in 2018. This PDF was generated by Digital Library of Amateur Radio & Communications from the WARC files in 2026.

Date span: 2007-04-07 through 2017-01-31

Source WARC: mmr40owngrp.aMfljit.warc.gz

Source item: https://archive.org/details/yahoo-groups-2018-03-28T05-42-17Z-c4656d

Messages included in this PDF: 739

Yahoo replaced the domain portions of email addresses with @... in the archived messages. Characters lost in Yahoo's archived text appear as ?.

Messages are presented in ascending Yahoo message-ID order. Gaps indicate records absent from the source WARC or messages omitted from this PDF as spam.

1. Bad readings at Q14

Yahoo group: mmr40owngrp
Date: 2007-04-07 21:40:32 UTC
From: looksbadworksgood
Topic: 1 Message: 1

D = 5.0
G = .5
S = -2.0

No apparent oscillation from the VFO is heard in a nearby general coverage receiver between 2.0 and 3.5Mhz.

WWV at 10Mhz can be heard distinctly when my scope probe is on pin 4 of U6 so the IF->AF path seems clear.

Looking forward to putting this little rig on the air.

Am I looking at a zapped J-FET?

Tom K2TA
Greenwood Lake, NY

2. Hello All

Yahoo group: mmr40owngrp
Date: 2007-04-07 21:41:08 UTC
From: KF4YYD
Topic: 2 Message: 2

Wanted to say hello. I have not yet finished my kit i need to remove a little solder, somehow i managed to get some in one of U7's holes before i placed the chip. Hoping to finish up the build tonight.

Once i get it up and running i would like to see about adding some kind of frequency display. i am also interested in adding k6xx's cw tunning aid. if you haven't seen this mod google his call sign it looks like it would be usefull.

Tom kf4yyd

3. Errata ..

Yahoo group: mmr40owngrp
Date: 2007-04-08 00:43:20 UTC
From: w7wel
Topic: 3 Message: 3

Hi all, just signed up.. Looking forward to a lively group and lots of fun with the mmr40..

Now, haven't received the kit yet, ordered it last Thursday so shouldn't be too long.

Today I downloaded and printed the manual. I seem to remember some of the MMR builders commenting on some discrepencies, I remember something to do with 29 versus 39 turns and a difference between something on the parts list and schematic, or some things like this. I'm wondering if corrections are listed somewhere. No mention on Doug's website..

Bill - W7WEL

4. Re: Errata ..

Yahoo group: mmr40owngrp
Date: 2007-04-08 01:00:30 UTC
From: KF4YYD
Topic: 3 Message: 4

Hey Bill,

You are correct about their being some minor descrepencies. To answer your questions the correct turns count for L1 the PTO coil should be 39. However in the manual it says 29, just do what Steve says though and don't try and count the number of turns you put on it, just fill up the space between the two holes.

The other small issue i found was with the parts placement guide; on it the values for R29, and R33 are reversed. R29 is 10 ohms and R33 is 470 ohms.

Tom kf4yyd

5. MMR-40 arrived in Japan

Yahoo group: mmr40owngrp
Date: 2007-04-08 14:17:25 UTC
From: qrpjl1kra
Topic: 5 Message: 5

Hi all,

Since QRP-L reject my post based on its IP adress
this is good opprtunity to join MMR-40 group.
MMR-40 arrived in Yokohama last wendsday.
As my first glance, I suppose,
MMR-40 will be an epoch-making SSB/CW dual mode kit
with wide coverage, enough power and simple fun.
Here in JA, the Mizuho MX-seies had been a famous
SSB/CW QRP transceiver longtime, but even they were
factory board assembled kit.

Thanks to Hendricks kit and all who related to
the MMR-40. I will post my progress.

JL1KRA/QRP Junichi Nakajima

6. Digital Readout

Yahoo group: mmr40owngrp
Date: 2007-04-08 15:34:07 UTC
From: Bob Miller
Topic: 6 Message: 6

I've been playing with the NorCal FCC-1/2 trying to interface it to the MMR-40. I can get the FCC-1 to read the frequency, of the PTO, in DIR mode but not when I try to use an off-set (IF-VFO). Has anyone else tried this?

Bob
wb6kwt

7. Need a picture of a finished rig

Yahoo group: mmr40owngrp
Date: 2007-04-08 15:36:21 UTC
From: KF4YYD
Topic: 7 Message: 7

We need a jpeg photo of a finished rig to place on the home page.
Anybody that would like to share one let me know and we will get it
posted.

Tom kf4yyd

8. Errata file

Yahoo group: mmr40owngrp
Date: 2007-04-08 15:33:59 UTC
From: KF4YYD
Topic: 8 Message: 8

All,

I have made a file available to document known build manual bugs. If anyone knows of a descrepancy please feel free to add it to the folder so that we might all benefit.

Tom kf4yyd

9. RE: [mmr40owngrp] Digital Readout

Yahoo group: mmr40owngrp
Date: 2007-04-08 17:42:04 UTC
From: Rob May
Topic: 6 Message: 9

Hi Bob,
I went and hooked up an FCC-1 to the MMR-40, set the IF at 10,000 kHz and IF-VFO. It seems to work fine. CW 7002 -7119, and SSB 7117 - 7254 approximately. I'm using the same power supply for the radio and the FCC-1 and just using the signal wire to the LO pad on the board (the one that's not next to the ground pad). What readings do you get with the offset? Just the PTO, just the LO, nothing, or some combination?
Rob
NV5E

>From: "Bob Miller" <wb6kwt@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Digital Readout
>Date: Sun, 08 Apr 2007 15:34:07 -0000
>
>I've been playing with the NorCal FCC-1/2 trying to interface it to
>the MMR-40. I can get the FCC-1 to read the frequency, of the PTO, in
>DIR mode but not when I try to use an off-set (IF-VFO). Has anyone
>else tried this?
>
>Bob
>wb6kwt
>

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10. RE: [mmr40owngrp] Digital Readout

Yahoo group: mmr40owngrp
Date: 2007-04-08 17:56:28 UTC
From: Bob Miller
Topic: 6 Message: 10

Rob,

I'm only able to get the PTO frequency, 2862 to 2728, SSB. When I put in the off-set, IF - VFO, I get a "Neg Freq" error.

My FCC-1 has the firmware for the FCC-2 installed so I can't try just the FCC-1, even thought I have the freq counter option selected.

Bob
wb6ket

-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On Behalf Of Rob May
Sent: Sunday, April 08, 2007 10:42 AM
To: mmr40owngrp@yahoogroups.com
Subject: RE: [mmr40owngrp] Digital Readout

Hi Bob,
I went and hooked up an FCC-1 to the MMR-40, set the IF at 10,000 kHz and IF-VFO. It seems to work fine. CW 7002 -7119, and SSB 7117 - 7254 approximately. I'm using the same power supply for the radio and the FCC-1 and just using the signal wire to the LO pad on the board (the one that's not next to the ground pad). What readings do you get with the offset? Just the PTO, just the LO, nothing, or some combination?
Rob
NV5E

>From: "Bob Miller" <wb6kwt@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Digital Readout
>Date: Sun, 08 Apr 2007 15:34:07 -0000
>
>I've been playing with the NorCal FCC-1/2 trying to interface it to
>the MMR-40. I can get the FCC-1 to read the frequency, of the PTO, in
>DIR mode but not when I try to use an off-set (IF-VFO). Has anyone
>else tried this?
>
>Bob
>wb6kwt
>

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Yahoo! Groups Links

11. RE: [mmr40owngrp] Digital Readout

Yahoo group: mmr40owngrp
Date: 2007-04-08 20:35:18 UTC
From: Rob May
Topic: 6 Message: 11

Bob,
I have the FCC-1 only, so you have different firmware. Have you tried the other configurations, ie. IF+VFO, VFO-IF? Seems like it could be a firmware bug. Maybe not many people have tried to hook it up to IF-VFO radios. An email to Bob Okas, W3CD might be order. According to qrz.com his email is vintage2@....
Rob
NV5E

>From: "Bob Miller" <wb6kwt@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: <mmr40owngrp@yahoogroups.com>
>Subject: RE: [mmr40owngrp] Digital Readout
>Date: Sun, 8 Apr 2007 10:56:28 -0700
>
>Rob,
>
>I'm only able to get the PTO frequency, 2862 to 2728, SSB. When I put in
>the
>off-set, IF - VFO, I get a "Neg Freq" error.
>
>My FCC-1 has the firmware for the FCC-2 installed so I can't try just the
>FCC-1, even thought I have the freq counter option selected.
>
>Bob
>wb6ket
>
>-----Original Message-----
>From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On
>Behalf Of Rob May
>Sent: Sunday, April 08, 2007 10:42 AM
>To: mmr40owngrp@yahoogroups.com
>Subject: RE: [mmr40owngrp] Digital Readout
>
>
>Hi Bob,
>I went and hooked up an FCC-1 to the MMR-40, set the IF at 10,000 kHz and
>IF-VFO. It seems to work fine. CW 7002 -7119, and SSB 7117 - 7254
>approximately. I'm using the same power supply for the radio and the FCC-1
>and just using the signal wire to the LO pad on the board (the one that's
>not next to the ground pad). What readings do you get with the offset?
>Just the PTO, just the LO, nothing, or some combination?
>Rob
>NV5E
>

>
> >From: "Bob Miller" <wb6kwt@...>
> >Reply-To: mmr40owngrp@yahoogroups.com
> >To: mmr40owngrp@yahoogroups.com
> >Subject: [mmr40owngrp] Digital Readout
> >Date: Sun, 08 Apr 2007 15:34:07 -0000
> >
> >I've been playing with the NorCal FCC-1/2 trying to interface it to
> >the MMR-40. I can get the FCC-1 to read the frequency, of the PTO, in
> >DIR mode but not when I try to use an off-set (IF-VFO). Has anyone
> >else tried this?
> >
> >Bob
> >wb6kwt
> >
>
>_____
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http://games.msn.com/en/flexicon/default.htm?icid=flexicon_hmemailtaglineapril07

12. MMR40 completed

Yahoo group: mmr40owngrp
Date: 2007-04-08 21:21:10 UTC
From: John Wells
Topic: 12 Message: 12

What a nice little rig!!! KD1JV has done it again!! :-)
I just finished my MMR40. It hears and speaks SSB and CW. It's putting out about 5 watts.
Came with a nice case, too. I had a problem with the PTO and not knowing where I was on the band, so I added a digital dial (similar to the FCC-1) mounted inside the top cover. Now if I could only figure out how to add the "simple" keyer.

Thanks to KY4YYD for posting his experience with the error on the parts placement sheet (R29 and R33). That sure saved me a lot of time.

Johnny Wells
KI4KWM (formerly WB5TVK)
Flying Pig #1175 Multipig+ #27
2N2-20/30/40

13. RE: [mmr40owngrp] Digital Readout

Yahoo group: mmr40owngrp
Date: 2007-04-08 21:20:56 UTC
From: Bob Miller
Topic: 6 Message: 13

Rob,

I've emailed Bob and he said he would try to find time to look into it. The other problem with my FCC-1, it was one of the beta builds and because it was working well, I never asked Bob for an updated PIC.

I've tried all the different combos, as well as trying FCC-2 but with the same results.

Bob
wb6kwt

-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On Behalf Of Rob May
Sent: Sunday, April 08, 2007 1:35 PM
To: mmr40owngrp@yahoogroups.com
Subject: RE: [mmr40owngrp] Digital Readout

Bob,
I have the FCC-1 only, so you have different firmware. Have you tried the other configurations, ie. IF+VFO, VFO-IF? Seems like it could be a firmware bug. Maybe not many people have tried to hook it up to IF-VFO radios. An email to Bob Okas, W3CD might be order. According to qrz.com his email is vintage2@....
Rob
NV5E

>From: "Bob Miller" <wb6kwt@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: <mmr40owngrp@yahoogroups.com>
>Subject: RE: [mmr40owngrp] Digital Readout
>Date: Sun, 8 Apr 2007 10:56:28 -0700
>
>Rob,
>
>I'm only able to get the PTO frequency, 2862 to 2728, SSB. When I put in
>the
>off-set, IF - VFO, I get a "Neg Freq" error.
>
>My FCC-1 has the firmware for the FCC-2 installed so I can't try just the
>FCC-1, even thought I have the freq counter option selected.
>
>Bob
>wb6ket
>

>-----Original Message-----
>From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On
>Behalf Of Rob May
>Sent: Sunday, April 08, 2007 10:42 AM
>To: mmr40owngrp@yahoogroups.com
>Subject: RE: [mmr40owngrp] Digital Readout
>
>
>Hi Bob,
>I went and hooked up an FCC-1 to the MMR-40, set the IF at 10,000 kHz and
>IF-VFO. It seems to work fine. CW 7002 -7119, and SSB 7117 - 7254
>approximately. I'm using the same power supply for the radio and the FCC-1
>and just using the signal wire to the LO pad on the board (the one that's
>not next to the ground pad). What readings do you get with the offset?
>Just the PTO, just the LO, nothing, or some combination?
>Rob
>NV5E
>
>
> >From: "Bob Miller" <wb6kwt@...>
> >Reply-To: mmr40owngrp@yahoogroups.com
> >To: mmr40owngrp@yahoogroups.com
> >Subject: [mmr40owngrp] Digital Readout
> >Date: Sun, 08 Apr 2007 15:34:07 -0000
> >
> >I've been playing with the NorCal FCC-1/2 trying to interface it to
> >the MMR-40. I can get the FCC-1 to read the frequency, of the PTO, in
> >DIR mode but not when I try to use an off-set (IF-VFO). Has anyone
> >else tried this?
> >
> >Bob
> >wb6kwt
> >
>
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14. Re: [mmr40owngrp] MMR40 completed

Yahoo group: mmr40owngrp
Date: 2007-04-08 22:09:06 UTC
From: Ken N9VV
Topic: 12 Message: 14

tape a pix with your digi camera Johnny,
we would love to see your rig.
de ken n9vv

John Wells wrote:
>
>
> What a nice little rig!!! KD1JV has done it again!! :-)
> I just finished my MMR40. It hears and speaks SSB and CW. It's putting
> out about 5 watts.
> Came with a nice case, too. I had a problem with the PTO and not
> knowing where I was on the band, so I added a digital dial (similar to
> the FCC-1) mounted inside the top cover. Now if I could only figure out
> how to add the "simple" keyer.
>
> Thanks to KY4YYD for posting his experience with the error on the parts
> placement sheet (R29 and R33). That sure saved me a lot of time.
>
> Johnny Wells
> KI4KWM (formerly WB5TVK)
> Flying Pig #1175 Multipig+ #27
> 2N2-20/30/40

15. MMR40 pic

Yahoo group: mmr40owngrp
Date: 2007-04-08 22:44:14 UTC
From: John Wells
Topic: 15 Message: 15

I mistakenly uploaded the pic to the files section. I have asked the Group moderator to move the file. You can see it in one of those folders. Dealing with the 600 hz BFO offset is a problem. There is no offset on SSB. For CW,if you tune the BFO low and set it in the counter, you can then retune the BFO and then connect the counter to the LO and set the counter to IF - VFO. This gets the CW on the proper beat note. So I think this works for me.

KI4KWM

16. Re: [mmr40owngrp] Errata file

Yahoo group: mmr40owngrp
Date: 2007-04-08 23:51:21 UTC
From: Tom Althoff
Topic: 8 Message: 16

One thing I found in my kit is that there were 5pf caps substituted for the 4.7 .... not sure if it's worth mentioning or not.

References to U5/U6 SA602 in the parts list should be SA612 as shipped.

----- Original Message -----
From: KF4YYD
To: mmr40owngrp@yahoogroups.com
Sent: Sunday, April 08, 2007 11:33 AM
Subject: [mmr40owngrp] Errata file

All,

I have made a file available to document known build manual bugs. If anyone knows of a descrepancy please feel free to add it to the folder so that we might all benefit.

Tom kf4yyd

17. Re: MMR-40 arrived in Japan

Yahoo group: mmr40owngrp
Date: 2007-04-09 09:59:59 UTC
From: looksbadworksgood
Topic: 5 Message: 17

--- In mmr40owngrp@yahoogroups.com, "qrpjl1kra" <mx6s@...> wrote:
>
> Hi all,
>
> Since QRP-L reject my post based on its IP adress
> this is good opprtunity to join MMR-40 group.
> MMR-40 arrived in Yokohama last wendsday.
> As my first glance, I suppose,
> MMR-40 will be an epoch-making SSB/CW dual mode kit
> with wide coverage, enough power and simple fun.
> Here in JA, the Mizuho MX-seies had been a famous
> SSB/CW QRP transceiver longtime, but even they were
> factory board assembled kit.
>
> Thanks to Hendricks kit and all who related to
> the MMR-40. I will post my progress.
>
> JL1KRA/QRP Junichi Nakajima
>

Welcome to the group Junichi! I remember the Mizuho MX's!

Good luck with your new radio. I can hardly wait to make some QSO's
with mine.

73 de Tom K2TA

18. Re: MMR40 pic

Yahoo group: mmr40owngrp
Date: 2007-04-09 10:01:24 UTC
From: looksbadworksgood
Topic: 15 Message: 18

--- In mmr40owngrp@yahoogroups.com, "John Wells" <JWells6391@...> wrote:
>
> I mistakenly uploaded the pic to the files section. I have asked the
> Group moderator to move the file. You can see it in one of those
> folders. Dealing with the 600 hz BFO offset is a problem. There is
no
> offset on SSB. For CW,if you tune the BFO low and set it in the
> counter, you can then retune the BFO and then connect the counter to
> the LO and set the counter to IF - VFO. This gets the CW on the
proper
> beat note. So I think this works for me.
>
> KI4KWM
>

Wow! What a nice job John!

19. New file uploaded to mmr40owngrp

Yahoo group: mmr40owngrp
Date: 2007-04-09 12:06:52 UTC
From: mmr40owngrp@yahoogroups.com
Topic: 19 Message: 19

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the mmr40owngrp
group.

File : /Digital Dial and offset.doc
Uploaded by : rafterdog <JWells6391@...>
Description : connecting digital dial

You can access this file at the URL:
http://groups.yahoo.com/group/mmr40owngrp/files/Digital%20Dial%20and%20offset.doc

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/help/us/groups/files

Regards,

rafterdog <JWells6391@...>

20. Smoke Test

Yahoo group: mmr40owngrp
Date: 2007-04-10 00:33:33 UTC
From: KF4YYD
Topic: 20 Message: 20

Good news from Fredericksburg! powered up the rig for the firstime tonight and it passed the smoke test with flying colors. Afterward I measured the voltages coming out of the two 7805's and I have a near perfect 5.03 volts. I'm happy.....

All I can do tonight and maybe for a couple of days as I don't have anything to do the alignment with :(

Tom
kf4yyd

21. questions on the MMR-40

Yahoo group: mmr40owngrp
Date: 2007-04-10 01:09:31 UTC
From: jflint5429
Topic: 21 Message: 21

I am looking to buy the MMR-40
it will be my first radio(other then a HT), just licensed in Jan

what do you guys think of the MMR-40 as a first radio?

who selective is the tuning on CW and SSB?

Thanks
KD8EZS

22. Inductance on PTO

Yahoo group: mmr40owngrp
Date: 2007-04-10 11:39:07 UTC
From: Tim O'Rourke
Topic: 22 Message: 22

Has anyone measured the inductance range on the PTO on a rig that is working correctly?
Tim W4YN

23. Re: questions on the MMR-40

Yahoo group: mmr40owngrp
Date: 2007-04-10 11:46:28 UTC
From: Tom
Topic: 21 Message: 23

--- In mmr40owngrp@yahoogroups.com, "jflint5429" <kjzwilliams@...>
wrote:
>
> I am looking to buy the MMR-40
> it will be my first radio(other then a HT), just licensed in Jan
>
> what do you guys think of the MMR-40 as a first radio?
>
> who selective is the tuning on CW and SSB?
>
> Thanks
> KD8EZS
>

I'm sure Steve can give you exact specs on the selectivity. It uses wide and narrow audio filtering instead of putting a narrow crystal filter in the i.f. The wide position offers hi-fi sounding SSB and broad tuning for browsing the band on cw. The narrow audio filter is pretty sharp and really cuts down on the interference on either side.

Regarding your first question. I can give you some quick pro's and con's with my limited experience with the radio.

Plusses:
1) Without a doubt...the MMR-40 is one of the best bargains in amateur radio at less than $100 bucks.

2) It is a "real" radio. I'm going to be running it in some contests next month and can give a better report on performance under fire but I had it on this morning listening to the N8S operation along side my K2 and had no problems separating the guys in the pileup on the calling frequency using the narrow filter position of the MMR-40

3) Been so long since I first built something I don't know if this qualifies as an "easy" kit for a first timer. I don't think it is hard but you might want to have someone on hand to answer your questions if you have any during the assembly. This list is a good place to start! You'll learn about the radio and not be afraid to make modifications someday.

Not minusses...just areas of concern:
1) QRP operation especially with 5W on SSB is not like hitting the local repeater with the HT. Be prepared for disappointment if you don't get answers to your CQ's (some folks ignore weak sigs) or someone doesn't come back to you right away after you call them. I LOVE QRP operation. The better your antenna is (fullsize dipole at

60ft is great!) the more enjoyable your experience will be.

2) Since there is no analog or digital frequency readout you could find yourself accidently operating out of your license class frequency range. The guys here are talking about adding digital readouts to the radio. There are a quite a few to choose from. Steve has a nice wattmeter, audio amp, SWR meter and frequency counter in one unit available as a kit. There's another one that reads out the frequency in morse code which is pretty cool although it is all surface mount and a bit more difficult to build if you have fat fingers and bad eyes like I do.

I wouldn't mind having this radio as my first radio when I was a novice. Start with a good soldering iron and go from there.

Good luck! I hope you'll take the plunge and become a MMR-40 owner.

73 de Tom K2TA

24. Update on K2TA's MMR-40

Yahoo group: mmr40owngrp
Date: 2007-04-10 11:52:18 UTC
From: Tom
Topic: 24 Message: 24

I sent an e-mail to the list yesterday but did not see it post here today. Forgive me if this is redundant.

I found my problem with the LMO. Pulled L2 and checked the windings. They were ok and wound as per Steve's instructions. I did NOT like the looks of the tinned ends of each lead and decided to re-dip them in my solder pot to be sure all of the enamel got burned off.

When I re-installed L2...I had signals! It was great!

I listened using my K9AY loop and copied N8S this morning. Had no problems separating the guys in the pileup calling him. The radio sounds great!

Next step: Install output transistor and set bias. Hmmm..wait. I did note a problem that I might want to fix first. When I key the rig I can vary the sidetone level but not the freq. Need to look at that before I put in the PA FET.

See you guys on the air real soon!

-Tom K2TA

25. Re: Errata file

Yahoo group: mmr40owngrp
Date: 2007-04-10 19:32:24 UTC
From: w7wel
Topic: 8 Message: 25

In reading through the instruction manual I noticed the following discrepency. Diode D6 is listed in the instructions as #5817 and on the placement guide (Lower left quadrant) as #5718. I'm not sure which is correct but, it is mentioned that this is the BLACK bodied diode (not glass) so there shouldn't be hard to figure out in spite of the number discrepency.

--- In mmr40owngrp@yahoogroups.com, "Tom Althoff" <althoff@...> wrote:
>
> One thing I found in my kit is that there were 5pf caps substituted for the 4.7 .... not sure if it's worth mentioning or not.
>
> References to U5/U6 SA602 in the parts list should be SA612 as shipped.
>
> ----- Original Message -----
> From: KF4YYD
> To: mmr40owngrp@yahoogroups.com
> Sent: Sunday, April 08, 2007 11:33 AM
> Subject: [mmr40owngrp] Errata file
>
>
> All,
>
> I have made a file available to document known build manual bugs. If
> anyone knows of a descrepancy please feel free to add it to the folder
> so that we might all benefit.
>
> Tom kf4yyd
>

26. Re: questions on the MMR-40

Yahoo group: mmr40owngrp
Date: 2007-04-10 19:49:33 UTC
From: KF4YYD
Topic: 21 Message: 26

--- In mmr40owngrp@yahoogroups.com, "jflint5429" <kjzwilliams@...>
wrote:
>
> I am looking to buy the MMR-40
> it will be my first radio(other then a HT), just licensed in Jan
>
> what do you guys think of the MMR-40 as a first radio?
>
> who selective is the tuning on CW and SSB?
>
> Thanks
> KD8EZS
>

I'll put in my two cents. The only other radio I have is a Small Wonders Labs SW-40+ which was the first radio kit I had ever put together. As far as comparing the SW to the MMR I have to say I think that this kit (the MMR) was a little bit more of a challenge to assemble. Not that this kit wouldn't be suitable for a first time builder. I think you could do it, just take your time; I also found that a fine point tip on the soldering iron worked better for me. Some of the hole spacing was a bit closer than I was used to.

All I have done with mine so far is the smoke test but I have to say I am impressed with what I have so far and can't wait until get her finished and try it out on the air.

Tom kf4yyd

27. Re: Update on K2TA's MMR-40

Yahoo group: mmr40owngrp
Date: 2007-04-10 20:02:33 UTC
From: KF4YYD
Topic: 24 Message: 27

--- In mmr40owngrp@yahoogroups.com, "Tom" <althoff@...> wrote:
>
> I sent an e-mail to the list yesterday but did not see it post here
> today. Forgive me if this is redundant.

Hi Tom,

I saw your message yesterday but it posted on QRP-l ;)

Tom kf4yyd

28. Way Too Much Fun

Yahoo group: mmr40owngrp
Date: 2007-04-10 20:23:05 UTC
From: Randal
Topic: 28 Message: 28

OK, you guys are having way too much fun. Can't let you get away with it. Ordered my MMR40 a few minutes ago.
72,
Ran - W1IN

29. FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Yahoo group: mmr40owngrp
Date: 2007-04-10 23:12:13 UTC
From: Tom
Topic: 29 Message: 29

Adjusted the bandpass filters for transmit. Set the bias and checking the power output...5W no problem.

Misunderstood the purpose of V4. Somehow thought it set the freq of the sidetone for the offset of 600Hz. It's the sidetone level control to drive the mike input. The OTHER sidetone pot sets the monitored sidetone level. No problem with V4 after all.

I disconnected the dummy load and hooked up my 40M ground plane. Without touching the tuning slug I heard HA5KDQ CQ'ing. Signed my call twice with my old Navy sparkless straight key and got him for my first MMR-40 QSO!!!

I worked the N8S this morning for a new 40M country with the K2 and the Titan amp but this MMR-40 QSO was FAR more exciting, way more enjoyable and certainly more satisfying!

Thanks Steve for a really fun rig!

I'm only halfway done. Still need to build the varicap tuned external LMO and mount this entire thing with the Elecraft AF1 audio filter, Elecraft T1 autotuner and K40 keyer into my Kenwood TS-520 remote VFO cabinet with its gear reduction tuning and matching Kenwood SP-520 external speaker.

Not going for small rig. Going for big 'ol wierd thang for QRP contesting on 40M.

Pics to follow shortly. (where shortly <= 2 weeks!)

-Tom K2TA

30. Re: questions on the MMR-40

Yahoo group: mmr40owngrp
Date: 2007-04-11 00:21:05 UTC
From: jflint5429
Topic: 21 Message: 30

Thanks for information

I plan to take the Extra test on 4/26, I did Tech and General 1/15/07
with morse test
until I get Extra I'll have to watch 7.125-7.175, either stay at the
top of the SSB range, or get a freq display - was looking at Norcal
qrp's FCC-1

I have built interface modules for the PC for years(homebrew security
systems, and stepper motor control circuits etc), so the assembly
should not be a problem, just the troubleshooting will be new to me
(the RF part anyway)

where can I find info on the multi-kit steve offers with a freq
counter?

I checked out the rock-mite and Sw+ and dc40, and I didn't think they
would be a good first radio, looks like I will be getting the MMR-40

thanks for the help
KD8EZS

--- In mmr40owngrp@yahoogroups.com, "Tom" <althoff@...> wrote:
>
> --- In mmr40owngrp@yahoogroups.com, "jflint5429" <kjzwilliams@>
> wrote:
> >
> > I am looking to buy the MMR-40
> > it will be my first radio(other then a HT), just licensed in Jan
> >
> > what do you guys think of the MMR-40 as a first radio?
> >
> > who selective is the tuning on CW and SSB?
> >
> > Thanks
> > KD8EZS
> >
>
> I'm sure Steve can give you exact specs on the selectivity. It
uses
> wide and narrow audio filtering instead of putting a narrow crystal
> filter in the i.f. The wide position offers hi-fi sounding SSB
and
> broad tuning for browsing the band on cw. The narrow audio filter
is
> pretty sharp and really cuts down on the interference on either

side.
>
> Regarding your first question. I can give you some quick pro's and
> con's with my limited experience with the radio.
>
> Plusses:
> 1) Without a doubt...the MMR-40 is one of the best bargains in
> amateur radio at less than $100 bucks.
>
> 2) It is a "real" radio. I'm going to be running it in some
contests
> next month and can give a better report on performance under fire
but
> I had it on this morning listening to the N8S operation along side
my
> K2 and had no problems separating the guys in the pileup on the
> calling frequency using the narrow filter position of the MMR-40
>
> 3) Been so long since I first built something I don't know if this
> qualifies as an "easy" kit for a first timer. I don't think it is
> hard but you might want to have someone on hand to answer your
> questions if you have any during the assembly. This list is a good
> place to start! You'll learn about the radio and not be afraid to
> make modifications someday.
>
> Not minusses...just areas of concern:
> 1) QRP operation especially with 5W on SSB is not like hitting the
> local repeater with the HT. Be prepared for disappointment if you
> don't get answers to your CQ's (some folks ignore weak sigs) or
> someone doesn't come back to you right away after you call them.
I
> LOVE QRP operation. The better your antenna is (fullsize dipole at
> 60ft is great!) the more enjoyable your experience will be.
>
> 2) Since there is no analog or digital frequency readout you could
> find yourself accidently operating out of your license class
> frequency range. The guys here are talking about adding digital
> readouts to the radio. There are a quite a few to choose from.
> Steve has a nice wattmeter, audio amp, SWR meter and frequency
> counter in one unit available as a kit. There's another one that
> reads out the frequency in morse code which is pretty cool although
> it is all surface mount and a bit more difficult to build if you
have
> fat fingers and bad eyes like I do.
>
> I wouldn't mind having this radio as my first radio when I was a
> novice. Start with a good soldering iron and go from there.
>
> Good luck! I hope you'll take the plunge and become a MMR-40 owner.
>

> 73 de Tom K2TA
>

31. Transmitter woes

Yahoo group: mmr40owngrp
Date: 2007-04-11 02:46:54 UTC
From: Rob May
Topic: 31 Message: 31

My transmitter problems continue. While poking around, I touched, broke, shorted, or somehow managed to mess up the transmitter further. On transmit (with bias pot and V4 full ccw) I draw 140ma instead of the 90ma I saw before. I'm also seeing 3.6 Vdc at the drain of Q2 (instead of 0). It varies with V4, so I'm pretty sure it's rectified RF (4.7Vrms is present at the drain), but where is it getting rectified? There is no other dc voltage on the gate or source of Q2 or the other side of C27. Only on the trace that goes from C27 to the drain of Q2. When I get this problem solved I can go back to figuring out why I have low output. 1.9 watts @ 390ma. All the voltages in the RF chain seem to be about 1/3 low. I've built lots of kits, but this is kickin' my butt! I'm almost to the point of buying another kit and building it just so I can do side by side diagnostics. Steven, KD1JV, has been very patient trying to help me, but I'm stumped. Thanks for letting me vent!
Rob
NV5E

_____
Need a break? Find your escape route with Live Search Maps.
http://maps.live.com/?icid=hmtag3

32. Re: [mmr40owngrp] Transmitter woes

Yahoo group: mmr40owngrp
Date: 2007-04-11 07:53:17 UTC
From: Tom Althoff
Topic: 31 Message: 32

Rob - Did you get "normal" RF readiings using the VRF and DET test points before you installed the output transistor? That would make troubleshooting a bit easier.

If you did before you installed the output transistor (Q10? don't have the info in front of me) and things went south later I would probably remove Q10 and go back through the checklist of voltages...peaking the bandpass transformers etc and confirming 5-7 volts at VRF with a wire run between the DET hole and the Gate.

If you don't get the 5-7 VDC there then there is a problem in the drive path...I start looking at Q9...test it with an ohmmeter or look for wrong value resistor (measure with ohmmeter not rely on color bands).

If you do get 5-7 VDC drive then there's not much else other than wiring error near L3 and L4, wrong cap value, or bad Q10 IRF530A (now I have the info in front of me). If you can't find ANY problem there I'd start looking into oddball failure that could pull down the power...lift C27 to remove the RX front end from the output tank circuit to ensure something there is not pulling down the output.

I get frustrated at times too. It really helps to have someone come over and examine the board with a fresh pair of eyes who notice things that you might be overlooking.

Good luck Rob. Hey...a 2nd MMR-40 might not be a bad investment... Split operation...2nd RX for SWL..etc 8-)

- Tom K2TA

----- Original Message -----
From: Rob May
To: mmr40owngrp@yahoogroups.com
Sent: Tuesday, April 10, 2007 10:46 PM
Subject: [mmr40owngrp] Transmitter woes

My transmitter problems continue. While poking around, I touched, broke, shorted, or somehow managed to mess up the transmitter further. On transmit (with bias pot and V4 full ccw) I draw 140ma instead of the 90ma I saw before. I'm also seeing 3.6 Vdc at the drain of Q2 (instead of 0). It varies with V4, so I'm pretty sure it's rectified RF (4.7Vrms is present at the drain), but where is it getting rectified? There is no other dc voltage on the gate or source of Q2 or the other side of C27. Only on the trace that goes from C27 to the drain of Q2. When I get this problem solved I can go back to figuring out why I have low output. 1.9 watts @ 390ma. All the voltages in the RF chain seem to be about 1/3 low. I've built lots of kits, but this is kickin' my butt! I'm almost to the point of buying another kit and building it just so I can do side by side diagnostics. Steven, KD1JV, has been very patient trying to help me, but I'm stumped. Thanks for letting me vent!
Rob

NV5E

_____
Need a break? Find your escape route with Live Search Maps.
http://maps.live.com/?icid=hmtag3

33. Re: [mmr40owngrp] FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Yahoo group: mmr40owngrp
Date: 2007-04-11 12:40:35 UTC
From: JWells6391@aol.com
Topic: 29 Message: 33

Congrats on the completion of your rig!

American Samoa and Hungary are a great way to start!

N8S
DXCC Most Wanted Ranking #1 - 2007
Swains Island, American Samoa, S. Pacific Ocean
USA

Way to go, Tom !!

********** See what's free at http://www.aol.com.

34. FCC-1/2

Yahoo group: mmr40owngrp
Date: 2007-04-12 00:00:10 UTC
From: Bob Miller
Topic: 34 Message: 34

I finally got my NorCal FCC-1/2 working with the MMR-40. I reprogrammed the PIC and that resolved the problem. My unit had the first Beta version software loaded and may have been corrupted while I was attempting to get it to work with the MMR-40.

To use the FCC-2 with the MMR-40 you need to cut the trace between the PTO pads and use the pad next to the ground pad as the input. I installed a 3 pin header on those three pads so I can restore the PTO function quickly if need be. There isn't enough room in the xcvr case to install the NorCal unit, at least not in mine because of where I put the speaker. I'm going to put a RCA jack on the back of the xcvr and run a cable from there to the PTO pads then I'll mount the FCC-1/2 in another case. That will leave the FCC-1/2 available for other uses, when needed.

Bob
wb6kwt

35. Re: FCC-1/2

Yahoo group: mmr40owngrp
Date: 2007-04-12 00:15:18 UTC
From: KF4YYD
Topic: 34 Message: 35

--- In mmr40owngrp@yahoogroups.com, "Bob Miller" <wb6kwt@...> wrote:
>
> I finally got my NorCal FCC-1/2 working with the MMR-40.

Bob,

Thanks for the update. Anyway we can see a picture of your work, as someone who has never modified anything I always find a picture helps me when trying to visualize how to do something.

I definitly need to get a display of some sorts and have been thinking of looking into a deeper case so I can mount it to the front with the rest of the controls.

Tom kf4yyd

36. Template problems

Yahoo group: mmr40owngrp
Date: 2007-04-12 00:19:46 UTC
From: KF4YYD
Topic: 36 Message: 36

Hi All,

I'm stumped with the BMP images of the speaker/panel drilling guides.
When I print mine out they are HUGE, anyone else have this problem or
do I need to reduce the images prior to printing?

Tom kf4yyd

37. RE: [mmr40owngrp] Template problems

Yahoo group: mmr40owngrp
Date: 2007-04-12 00:30:10 UTC
From: Rob May
Topic: 36 Message: 37

It's weird, my printer at home prints them huge and the printer at work prints them the right size. When I open the PANEL.BMP in MS Paint and click on the Image->Attributes tab, it says the image is 7.9 x 12.1 inches. That is what my printer is trying to print. I'll investigate my printer at work tomorrow and see how I have it set up. If all else fails, I'll print them out at work and mail them to you if you like.
Rob
NV5E

>From: "KF4YYD" <kf4yyd@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Template problems
>Date: Thu, 12 Apr 2007 00:19:46 -0000
>
>Hi All,
>
>I'm stumped with the BMP images of the speaker/panel drilling guides.
>When I print mine out they are HUGE, anyone else have this problem or
>do I need to reduce the images prior to printing?
>
>Tom kf4yyd
>

_____
Exercise your brain! Try Flexicon.
http://games.msn.com/en/flexicon/default.htm?icid=flexicon_hmemailtaglineapril07

38. Re: Template problems

Yahoo group: mmr40owngrp
Date: 2007-04-12 01:07:01 UTC
From: KF4YYD
Topic: 36 Message: 38

Okay so I'm not stupid! That's the same size mine printed out, not sure what is up with that. If you do have to mail them, to which I will say Thanks in advance, I'm good on QRZ.com. But I'm curious to know how your work printer is set up, I have an HP PSC 750 and I have never encountered this problem before.

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "Rob May" <roblitespeed@...> wrote:
>
> It's weird, my printer at home prints them huge and the printer at work
> prints them the right size. When I open the PANEL.BMP in MS Paint and click
> on the Image->Attributes tab, it says the image is 7.9 x 12.1 inches. That
> is what my printer is trying to print. I'll investigate my printer at work
> tomorrow and see how I have it set up. If all else fails, I'll print them
> out at work and mail them to you if you like.
> Rob
> NV5E

39. Alright

Yahoo group: mmr40owngrp
Date: 2007-04-12 02:30:55 UTC
From: Garry
Topic: 39 Message: 39

I'm sure the wife will wish I had never run across this group. Just took the plunge and placed an order for one. Ship on Monday Doug said. So now begins the wait.

I just couldn't stand to see you guys all having so much fun and me not. HI

Are these critters serial numbered? That would be interesting, especially to have an early sn. though not sure if I'm still what you might term "early"

Next thing (once I get this up and running), we should try a "net" or on air meeting of MMR40's. With a decent antenna and favourable conditions we might actually get in some great QSO's on 40, who knows.

I'll be watching the posts here for the next while with a great deal of interest.

Garry/Va7nv/Ve7ajj

40. RE: [mmr40owngrp] Re: Template problems

Yahoo group: mmr40owngrp
Date: 2007-04-12 13:18:39 UTC
From: Rob May
Topic: 36 Message: 40

Tom,
When I open the PANEL.BMP file in Paint at work and go to the
Image->Attributes tab it says 2.88 x 4.80, the correct size, doesn't have
anything to do with the printer. Must be a different version of Paint. I
dropped two copies of each BMP in the mail to you.
Rob
NV5E

>From: "KF4YYD" <kf4yyd@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Re: Template problems
>Date: Thu, 12 Apr 2007 01:07:01 -0000
>
>Okay so I'm not stupid! That's the same size mine printed out, not
>sure what is up with that. If you do have to mail them, to which I
>will say Thanks in advance, I'm good on QRZ.com. But I'm curious to
>know how your work printer is set up, I have an HP PSC 750 and I have
>never encountered this problem before.
>
>Tom kf4yyd
>
>--- In mmr40owngrp@yahoogroups.com, "Rob May" <roblitespeed@...>
>wrote:
> >
> > It's weird, my printer at home prints them huge and the printer at
>work
> > prints them the right size. When I open the PANEL.BMP in MS Paint
>and click
> > on the Image->Attributes tab, it says the image is 7.9 x 12.1
>inches. That
> > is what my printer is trying to print. I'll investigate my printer
>at work
> > tomorrow and see how I have it set up. If all else fails, I'll
>print them
> > out at work and mail them to you if you like.
> > Rob
> > NV5E
>
>

Get a FREE Web site, company branded e-mail and more from Microsoft Office
Live! http://clk.atdmt.com/MRT/go/mcrssaub0050001411mrt/direct/01/

41. Alingment request

Yahoo group: mmr40owngrp
Date: 2007-04-12 21:20:33 UTC
From: KF4YYD
Topic: 41 Message: 41

Okay guys, I have my mmr finished, well the board is not the case. Anyway would someone here be willing to align my radio for me? I ask because I have no way of doing it myself. The only other radio I have is my SW-40+ (which has never be aligned either) and I have no way of checking out the operating frequency. It's part of the reason I never get to use my SW+ I have no idea where I am on the band and don't want to operate out of operating class privelages.

Due to work/family committments I never get to socialize with any local hams here, which is why I am asking.

Let me know, and yes you can certinally check it out on air so you can tell me if I built the thing properly ;)

Thanks de Tom kf4yyd

(A general class but in reality more like a 1950's novice)

42. Re: Template problems

Yahoo group: mmr40owngrp
Date: 2007-04-12 21:08:09 UTC
From: KF4YYD
Topic: 36 Message: 42

--- In mmr40owngrp@yahoogroups.com, "Rob May" <roblitespeed@...> wrote:
>
> Tom,
> When I open the PANEL.BMP file in Paint at work and go to the
> Image->Attributes tab it says 2.88 x 4.80, the correct size, doesn't
have
> anything to do with the printer. Must be a different version of
Paint. I
> dropped two copies of each BMP in the mail to you.
> Rob
> NV5E

Thanks alot Rob! You are a gentleman and a scholar. (As my grandfather
would have said)

Tom kf4yyd

43. RECEIVED TODAY

Yahoo group: mmr40owngrp
Date: 2007-04-12 22:32:41 UTC
From: w7wel
Topic: 43 Message: 43

Just got back from the mailbox across the street and, right on cue,
there was a small box from Doug Hendricks.. I'll have it open in
about 1 minute and check off the parts...

Bill - W7WEL

44. FCC-1/2

Yahoo group: mmr40owngrp
Date: 2007-04-12 23:07:06 UTC
From: Bob Miller
Topic: 34 Message: 44

For those who might want to use subject items with the MMR-40, I can report that they work great with the little rig. The nice thing about this is you can tune the whole band without stopping to flip the CW switch. You have access to two VFO's via the A-B switch so you can listen on one freq and then shift back to the original freq to transmit. Lots of flexibility. The FCC-2 can do FSK too! and to top it off you have a real digital frequency read out down to the HZ, if you want it.

I would be interested in what microphone you are using with your MMR-40, I borrowed one from Doug Hendricks and have to return it at the next NorCal meeting so I'm on the hunt.

Bob
wb6kwt

45. Re: RECEIVED TODAY

Yahoo group: mmr40owngrp
Date: 2007-04-12 23:17:59 UTC
From: KF4YYD
Topic: 43 Message: 45

--- In mmr40owngrp@yahoogroups.com, "w7wel" <wlinn@...> wrote:
>
> Just got back from the mailbox across the street and, right on cue,
> there was a small box from Doug Hendricks.. I'll have it open in
> about 1 minute and check off the parts...
>
> Bill - W7WEL
>

And I bet the soldering iron has already made its way o the bord too...

Tom kf4yyd

46. Re: FCC-1/2

Yahoo group: mmr40owngrp
Date: 2007-04-12 23:39:55 UTC
From: KF4YYD
Topic: 34 Message: 46

Thanks for the update Bob, I was checking those out on the web the other day, don't know if I'm up to the task of surface mount yet though.

I've been looking for ideas on mic's too. I've been thinking that the homebrew showerhead mic might be an interesting way to go. (March 2007 QST) Though instead of just lifting it straight from the article I thought I might try using the electronics out of W1FB's Design Notebook and see if I can teach myself something.

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "Bob Miller" <wb6kwt@...> wrote:
>
> For those who might want to use subject items with the MMR-40, I can
> report that they work great with the little rig. The nice thing about
> this is you can tune the whole band without stopping to flip the CW
> switch. You have access to two VFO's via the A-B switch so you can
> listen on one freq and then shift back to the original freq to
> transmit. Lots of flexibility. The FCC-2 can do FSK too! and to top it
> off you have a real digital frequency read out down to the HZ, if you
> want it.
>
> I would be interested in what microphone you are using with your
> MMR-40, I borrowed one from Doug Hendricks and have to return it at
> the next NorCal meeting so I'm on the hunt.
>
> Bob
> wb6kwt
>

47. D4 (5.1 Zener)

Yahoo group: mmr40owngrp
Date: 2007-04-13 02:30:26 UTC
From: w7wel
Topic: 47 Message: 47

Received an oddball instead.. just wondering if 1N4231B (What I received) is correct? Anyone know. Searching for datasheets shows:

Part Number = 1N4231B
Manufacturer Name = Various
Description = General Purpose Reference Regulator Diode
V(Z) Nom.(V) Reference Voltage = 110
@I(Z) (A) (Test Condition) = 23m
Tolerance (%) = 5
Z(z) Max. (Ohms) Dyn. Imped. = 55
P(D) Max.(W) Power Dissipation = 10
Package Body Material = Metal
Package = DO-10
Military = N

However, it is a glass diode, absent the 1N designation, with a large sideways 4 followed by the inline numbers, 231b...

I just happened to have a 5.1 v Zener that I'm going to use. This one doesn't look right.

48. RE: [mmr40owngrp] D4 (5.1 Zener)

Yahoo group: mmr40owngrp
Date: 2007-04-13 02:59:28 UTC
From: Rob May
Topic: 47 Message: 48

A 1n5231 is a 5.1V zener. I'm sure that's what you have and is correct. A 1n5232 looks like a 5.6V zener from the datasheet here:
http://www.fairchildsemi.com/ds/1N/1N5231B.pdf
Mine was marked the same way as I recall, could only really see the "231".
Rob
NV5E

>From: "w7wel" <wlinn@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] D4 (5.1 Zener)
>Date: Fri, 13 Apr 2007 02:30:26 -0000
>
>Received an oddball instead.. just wondering if 1N4231B (What I
>received) is correct? Anyone know. Searching for datasheets shows:
>
>Part Number = 1N4231B
>Manufacturer Name = Various
>Description = General Purpose Reference Regulator Diode
>V(Z) Nom.(V) Reference Voltage = 110
>@I(Z) (A) (Test Condition) = 23m
>Tolerance (%) = 5
>Z(z) Max. (Ohms) Dyn. Imped. = 55
>P(D) Max.(W) Power Dissipation = 10
>Package Body Material = Metal
>Package = DO-10
>Military = N
>
>However, it is a glass diode, absent the 1N designation, with a large
>sideways 4 followed by the inline numbers, 231b...
>
>I just happened to have a 5.1 v Zener that I'm going to use. This
>one doesn't look right.
>

Exercise your brain! Try Flexicon.
http://games.msn.com/en/flexicon/default.htm?icid=flexicon_hmemailtaglineapril07

49. Re: [mmr40owngrp] D4 (5.1 Zener)

Yahoo group: mmr40owngrp
Date: 2007-04-13 04:02:25 UTC
From: Bill Linn
Topic: 47 Message: 49

Thanks Rob, I installed the one I had. Hope it is supposed to be a 5.1..

Also, the placement guide lists R36 as 10K and the schematic shows a 22K..
wonder which is correct?

Bill

On Thu, 12 Apr 2007 19:59:28 -0700, Rob May <roblitespeed@...>
wrote:

> A 1n5231 is a 5.1V zener. I'm sure that's what you have and is
> correct. A
> 1n5232 looks like a 5.6V zener from the datasheet here:
> http://www.fairchildsemi.com/ds/1N/1N5231B.pdf
> Mine was marked the same way as I recall, could only really see the
> "231".
> Rob
> NV5E
>
>
>> From: "w7wel" <wlinn@...>
>> Reply-To: mmr40owngrp@yahoogroups.com
>> To: mmr40owngrp@yahoogroups.com
>> Subject: [mmr40owngrp] D4 (5.1 Zener)
>> Date: Fri, 13 Apr 2007 02:30:26 -0000
>>
>> Received an oddball instead.. just wondering if 1N4231B (What I
>> received) is correct? Anyone know. Searching for datasheets shows:
>>
>> Part Number = 1N4231B
>> Manufacturer Name = Various
>> Description = General Purpose Reference Regulator Diode
>> V(Z) Nom.(V) Reference Voltage = 110
>> @I(Z) (A) (Test Condition) = 23m
>> Tolerance (%) = 5
>> Z(z) Max. (Ohms) Dyn. Imped. = 55
>> P(D) Max.(W) Power Dissipation = 10
>> Package Body Material = Metal
>> Package = DO-10
>> Military = N
>>
>> However, it is a glass diode, absent the 1N designation, with a large
>> sideways 4 followed by the inline numbers, 231b...
>>
>> I just happened to have a 5.1 v Zener that I'm going to use. This
>> one doesn't look right.

>>
>
> _____
> Exercise your brain! Try Flexicon.
> http://games.msn.com/en/flexicon/default.htm?icid=flexicon_hmemailtaglineapril07
>
>
>
> Yahoo! Groups Links
>
>
>
>
>

--
Using Opera's revolutionary e-mail client: http://www.opera.com/mail/

50. R36

Yahoo group: mmr40owngrp
Date: 2007-04-13 04:01:52 UTC
From: w7wel
Topic: 50 Message: 50

Another dilema, R36 is listed on the placement guide as 10K and on
the schematic as 22K (LL Quadrant) Wonder which is correct?
Anyone?

Thanks,
Bill - W7WEL

51. RE: [mmr40owngrp] R36

Yahoo group: mmr40owngrp
Date: 2007-04-13 12:01:43 UTC
From: Bob Miller
Topic: 50 Message: 51

Bill,

I believe I email Steve about that and he said he had changed some components values and the schematic didn't get changed. Go by the parts list and placement guide and you will be fine, at least my build did.

Bob
wb6kwt
-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On Behalf Of w7wel
Sent: Thursday, April 12, 2007 9:02 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] R36

Another dilema, R36 is listed on the placement guide as 10K and on the schematic as 22K (LL Quadrant) Wonder which is correct?
Anyone?

Thanks,
Bill - W7WEL

52. Giving up!?!?

Yahoo group: mmr40owngrp
Date: 2007-04-14 01:37:34 UTC
From: Rob May
Topic: 52 Message: 52

Well, not exactly. I can't make heads or tails of my transmitter problems, so I've given in and ordered another MMR-40 kit. I'll build it and then use it to do side by side toubleshooting with the less than optimum performing transmitter section on this MMR-40. Hopefully I'll find the problem quickly. I'll then offer the newer one for sale here and on qrp-l. Steve's kits seem to hold their value, so in the long run I don't think I'll be out much money. Meantime, I'm feeling much better since I stopped beating my head against the wall trying to fix this thing. Thanks to all who answered my previous posts. I hope to have better news by next weekend or so.
Rob
NV5E

_____
Can?t afford to quit your job? ? Earn your AS, BS, or MS degree online in 1 year.
http://www.classesusa.com/clickcount.cfm?id=866145&goto=http%3A%2F%2Fwww.classesusa.com%2Ffeaturedschools%2Fonlinedegreesmp%2Fform-dyn1.html%3Fsplovr%3D866143

53. Electric mic elements

Yahoo group: mmr40owngrp
Date: 2007-04-14 01:49:56 UTC
From: KF4YYD
Topic: 53 Message: 53

Cross Posting with permission:

I saw in the MMR-40 manual that an electret mike is needed for this rig. I have some small Electret elements (about the size of a #2 pencil eraser in diameter) that I would be happy to send out free to anyone if you send me an addressed stamped envelope. The manufacturer of them is Hoisiden and they are new parts.

Chris
KD4PBJ

I emailed Chris and asked him if I could post this here, he told me he had several hundred of them, and my wife thinks I'm a pack rat HA!

73's de Tom

54. Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Yahoo group: mmr40owngrp
Date: 2007-04-14 19:25:20 UTC
From: KF4YYD
Topic: 29 Message: 54

I can't wait to see this one. But now for a question, are you using the PC board standoffs that came in the kit? I ask because in my wife's never ending quest to get rid of my stuff she chucked the box that my kit came in. Of course the pc board spacers were in it and I could only rescue one of them.

I asked Doug KI6DS, about some replacements but he said they come with the case and so he has no extras. When I went over to Radio Shack and got the ones they have I found they were too damn tall, by about an 1/8 to 3/16's of an inch. And now my panel drill templates won't line up.

Tom kf4yyd

55. Re: [mmr40owngrp] Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Yahoo group: mmr40owngrp
Date: 2007-04-14 19:28:56 UTC
From: Tom Althoff
Topic: 29 Message: 55

Actually...not sure I saw any standoffs. I have it mounted via the BNC connector and a square hole that the power connector fits snugly in. I may put a bracket at the other end for mechanical stablility but it's pretty "stiff" just hanging vertically by the BNC and power connectors on the left side of the VFO cabinet.

----- Original Message -----
From: KF4YYD
To: mmr40owngrp@yahoogroups.com
Sent: Saturday, April 14, 2007 3:25 PM
Subject: [mmr40owngrp] Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

I can't wait to see this one. But now for a question, are you using the PC board standoffs that came in the kit? I ask because in my wife's never ending quest to get rid of my stuff she chucked the box that my kit came in. Of course the pc board spacers were in it and I could only rescue one of them.

I asked Doug KI6DS, about some replacements but he said they come with the case and so he has no extras. When I went over to Radio Shack and got the ones they have I found they were too damn tall, by about an 1/8 to 3/16's of an inch. And now my panel drill templates won't line up.

Tom kf4yyd

56. RE: [mmr40owngrp] Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Yahoo group: mmr40owngrp
Date: 2007-04-14 19:33:38 UTC
From: Bob Miller
Topic: 29 Message: 56

Maybe I missed something but my case came with the stand-offs molded into the
case. Our local Ace hardware store has a good selection of nylon spacers, you
might try that. You can get them with or without threads but the threaded ones are
expensive.

Bob
wb6kwt
-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On Behalf Of KF4YYD
Sent: Saturday, April 14, 2007 12:25 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

I can't wait to see this one. But now for a question, are you using the
PC board standoffs that came in the kit? I ask because in my wife's
never ending quest to get rid of my stuff she chucked the box that my
kit came in. Of course the pc board spacers were in it and I could only
rescue one of them.

I asked Doug KI6DS, about some replacements but he said they come with
the case and so he has no extras. When I went over to Radio Shack and
got the ones they have I found they were too damn tall, by about an 1/8
to 3/16's of an inch. And now my panel drill templates won't line up.

Tom kf4yyd

57. Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Yahoo group: mmr40owngrp
Date: 2007-04-14 19:43:42 UTC
From: KF4YYD
Topic: 29 Message: 57

You got to be kidding me, I never actually looked inside the case I was assuming that you had to use the aluminim ones that came with the kit! I was just placing the board outside and next to the case. Don't I feel like an idiot.

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "Bob Miller" <wb6kwt@...> wrote:
>
> Maybe I missed something but my case came with the stand-offs molded into
> the
> case. Our local Ace hardware store has a good selection of nylon spacers,
> you
> might try that. You can get them with or without threads but the threaded
> ones are
> expensive.
>
> Bob
> wb6kwt
> -----Original Message-----
> From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On
> Behalf Of KF4YYD
> Sent: Saturday, April 14, 2007 12:25 PM
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
>
>
> I can't wait to see this one. But now for a question, are you using the
> PC board standoffs that came in the kit? I ask because in my wife's
> never ending quest to get rid of my stuff she chucked the box that my
> kit came in. Of course the pc board spacers were in it and I could only
> rescue one of them.
>
> I asked Doug KI6DS, about some replacements but he said they come with
> the case and so he has no extras. When I went over to Radio Shack and

> got the ones they have I found they were too damn tall, by about
an 1/8
> to 3/16's of an inch. And now my panel drill templates won't line
up.
>
> Tom kf4yyd
>

58. RE: [mmr40owngrp] Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Yahoo group: mmr40owngrp
Date: 2007-04-14 19:57:10 UTC
From: Bob Miller
Topic: 29 Message: 58

Tom,

You shouldn't, I thought Doug might have changed cases. I don't recall my kit coming with stand offs
at all, maybe Doug added them on the later kits, mine was the first kit sent out.

Bob
wb6kwt
-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On Behalf Of KF4YYD
Sent: Saturday, April 14, 2007 12:44 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

You got to be kidding me, I never actually looked inside the case I was assuming that you had to use the aluminim ones that came with the kit! I was just placing the board outside and next to the case. Don't I feel like an idiot.

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "Bob Miller" <wb6kwt@...> wrote:
>
> Maybe I missed something but my case came with the stand-offs molded into
> the
> case. Our local Ace hardware store has a good selection of nylon spacers,
> you
> might try that. You can get them with or without threads but the threaded
> ones are
> expensive.
>
> Bob
> wb6kwt
> -----Original Message-----
> From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On
> Behalf Of KF4YYD
> Sent: Saturday, April 14, 2007 12:25 PM
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
>

>
> I can't wait to see this one. But now for a question, are you
using the
> PC board standoffs that came in the kit? I ask because in my
wife's
> never ending quest to get rid of my stuff she chucked the box
that my
> kit came in. Of course the pc board spacers were in it and I
could only
> rescue one of them.
>
> I asked Doug KI6DS, about some replacements but he said they come
with
> the case and so he has no extras. When I went over to Radio Shack
and
> got the ones they have I found they were too damn tall, by about
an 1/8
> to 3/16's of an inch. And now my panel drill templates won't line
up.
>
> Tom kf4yyd
>

59. Got a key!

Yahoo group: mmr40owngrp
Date: 2007-04-14 20:08:52 UTC
From: Thomas Butchers
Topic: 59 Message: 59

Well, after much gnashing of teeth about trying to get a key I can now say I have to me anyway, a nice one that didn't cost me a fortune.

I went to Ham Radio Outlet today to drool on all the things my wife won't let me have. Basically a radio that has multiple bands/modes and a general purpose receiver. I saw two Yasue 857D's and an Icom 746Pro walk out the door to guys who just passed the general exam lucky bastards.

Anyway, I was looking at the keys and paddles and was asking the guy behind the counter how come they didn't sell any lower priced entry level keys when the guy next to me said "you do know you don't have to take a Morse exam anymore." kid you not. When he suddenly (the salesman) remembered having a one to show me, and out comes this Vibroplex code mite SN#522. It may be small but after trying it out I decided that this was the key for me! It's perfect, small in size, but very stable on the table and my code sounded pretty good while tapping it out with my index finger. I'm happy!

Tom kf4yyd

"Beer is proof that God loves us and wants us to be happy." -Ben Franklin

--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.446 / Virus Database: 269.4.0/760 - Release Date: 4/13/2007
8:04 PM

60. Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Yahoo group: mmr40owngrp
Date: 2007-04-14 20:39:44 UTC
From: Rob May
Topic: 29 Message: 60

Tom,
There are not stand-offs for the molded box. The one stand-off you rescued
is likely the one that is soldered on to the brass screw so that the tuning
knob will fit on to it.
Rob
NV5E

>From: "KF4YYD" <kf4yyd@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
>Date: Sat, 14 Apr 2007 19:25:20 -0000
>
>I can't wait to see this one. But now for a question, are you using the
>PC board standoffs that came in the kit? I ask because in my wife's
>never ending quest to get rid of my stuff she chucked the box that my
>kit came in. Of course the pc board spacers were in it and I could only
>rescue one of them.
>
>I asked Doug KI6DS, about some replacements but he said they come with
>the case and so he has no extras. When I went over to Radio Shack and
>got the ones they have I found they were too damn tall, by about an 1/8
>to 3/16's of an inch. And now my panel drill templates won't line up.
>
>Tom kf4yyd
>

MSN is giving away a trip to Vegas to see Elton John.? Enter to win today.
http://msnconcertcontest.com?icid-nceltontagline

61. RE: [mmr40owngrp] Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Yahoo group: mmr40owngrp
Date: 2007-04-15 01:30:05 UTC
From: Thomas Butchers
Topic: 29 Message: 61

Ahhh, so there was probably only one to begin with. It has been one of those days. Better quit now and hope for a better one in the morning.

Tom kf4yyd

> -----Original Message-----
> From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On
> Behalf Of Rob May
> Sent: Saturday, April 14, 2007 4:40 PM
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] Re: FIRST QSO!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
>
> Tom,
> There are not stand-offs for the molded box. The one stand-off you
> rescued
> is likely the one that is soldered on to the brass screw so that the
> tuning
> knob will fit on to it.
> Rob
> NV5E

--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.446 / Virus Database: 269.4.0/760 - Release Date: 4/13/2007
8:04 PM

62. Got some Mods done!

Yahoo group: mmr40owngrp
Date: 2007-04-15 13:04:30 UTC
From: JWells6391@aol.com
Topic: 62 Message: 62

My rig is changing. I replaced the small PC mounted Mode switch on the bottom with a DPDT toggle mounted on the front. The good part is that now when going fron SSB to CW the switch is wired to ground the ring of the key/Mic jack. This is just like putting a mono plug into the key jack to short the sleeve to the ring for CW. Now more lifting up the rig to change modes.

I mounted a paddle jack on the back and not having a spare keyer chip, I stole it out of my HiMite (not recommended). I built up the keyer board based on the HiMite schematic. Although to power it, I used a SMT 5.1v zener wired to V+ on the power jack of the MMR40. The momentary speed tactile switch is mounted on the top cover. I fed the sidetone from the keyer into the audio at the input of the LM386. Had to experiment with the series resistor going to the keyer to get the sidetone at the proper level. Keyer works FB, speed control and all!

If you don't have a 5.1v zener, you can use a 6.8vzener in series with an Led. This will give you about the right voltage.

Now the rig is a real pleasure to use. With a new mode control on the front, a digital dial, and a keyer. Thanks to Hendricks QRP Kits and KD1JV for presenting this great kit!

John
KI4KWM
(formerly WB5TVK)

********** See what's free at http://www.aol.com.

63. Re: Got some Mods done!

Yahoo group: mmr40owngrp
Date: 2007-04-15 20:05:00 UTC
From: KF4YYD
Topic: 62 Message: 63

Hey Jonny,
You should have titled that as got some more mods done!! I like the idea of having the mode switch on the front, while I'm still working on mine it looks like the stock one could be slightly annoying. I better get the thing done before you come up with yet another one I like.

Upload us another picture Too!

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, JWells6391@... wrote:
>
>
> My rig is changing. I replaced the small PC mounted Mode switch on the
> bottom with a DPDT toggle mounted on the front. The good part is that now when
> going fron SSB to CW the switch is wired to ground the ring of the key/Mic
> jack. This is just like putting a mono plug into the key jack to short the
> sleeve to the ring for CW. Now more lifting up the rig to change modes.
>
> I mounted a paddle jack on the back and not having a spare keyer chip, I
> stole it out of my HiMite (not recommended). I built up the keyer board based
> on the HiMite schematic. Although to power it, I used a SMT 5.1v zener wired
> to V+ on the power jack of the MMR40. The momentary speed tactile switch is
> mounted on the top cover. I fed the sidetone from the keyer into the audio
> at the input of the LM386. Had to experiment with the series resistor going
> to the keyer to get the sidetone at the proper level. Keyer works FB, speed
> control and all!
>
> If you don't have a 5.1v zener, you can use a 6.8vzener in series with an
> Led. This will give you about the right voltage.
>
> Now the rig is a real pleasure to use. With a new mode control on

the front,
> a digital dial, and a keyer. Thanks to Hendricks QRP Kits and
KD1JV for
> presenting this great kit!
>
> John
> KI4KWM
> (formerly WB5TVK)
>
>
>
> ********** See what's free at
http://www.aol.com.
>

64. New pictures uploaded

Yahoo group: mmr40owngrp
Date: 2007-04-15 22:30:33 UTC
From: Rob May
Topic: 64 Message: 64

The Photo Album seemed a little bare, so I uploaded some pictures of my rig.
I'm going to cut new panels out of sheet aluminum for the front and try
the Testors decal kit to make labels.
http://ph.groups.yahoo.com/group/mmr40owngrp/photos/browse/f3ed
Rob
NV5E

_____
Mortgage refinance is Hot. *Terms. Get a 5.375%* fix rate. Check savings
https://www2.nextag.com/goto.jsp?product=100000035&url=%2fst.jsp&tm=y&search=mortgage_text
_links_88_h2bbb&disc=y&vers=925&s=4056&p=5117

65. This is all I have photo

Yahoo group: mmr40owngrp
Date: 2007-04-15 23:31:24 UTC
From: KF4YYD
Topic: 65 Message: 65

Well as long as we are talking pictures I uploaded what I have so far.
In the first photo I also have my new key to show its size. I'm getting
ready to pack it up to send to a fellow ham who is going to align it
for me.

Tom kf4yyd

66. Re: New pictures uploaded

Yahoo group: mmr40owngrp
Date: 2007-04-15 23:32:28 UTC
From: KF4YYD
Topic: 64 Message: 66

Rob, is this the one that isn't working yet? Still looks pretty good.

Tom kf4yyd

67. Re: New pictures uploaded

Yahoo group: mmr40owngrp
Date: 2007-04-16 01:07:38 UTC
From: Rob May
Topic: 64 Message: 67

Yep Tom, it is. Just the low transmit problem, this thing has a hot little receiver that I'm really impressed with. I've ordered another MMR-40 and when I get it built I'll run them side by side and figure out exactly where the problem is. I'm leaning toward a bad component, something I've never encountered in years of kit building, so I'm about overdue I guess. By the time I'm finished I'll know more about these radios than anyone but Steve!
Rob
NV5E

>From: "KF4YYD" <kf4yyd@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Re: New pictures uploaded
>Date: Sun, 15 Apr 2007 23:32:28 -0000
>
>Rob, is this the one that isn't working yet? Still looks pretty good.
>
>Tom kf4yyd
>

_____
Mortgage refinance is Hot. *Terms. Get a 5.375%* fix rate. Check savings
https://www2.nextag.com/goto.jsp?product=100000035&url=%2fst.jsp&tm=y&search=mortgage_text_links_88_h2bbb&disc=y&vers=925&s=4056&p=5117

68. RF Feedback issue on SSB transmit.

Yahoo group: mmr40owngrp
Date: 2007-04-16 02:12:38 UTC
From: Matthew Schiller
Topic: 68 Message: 68

So I finally got my MMR-40 put together. The receiver is working great, and the transmitter works fine into the dummy load. The trouble starts when I actually connect the real antenna. When I key the mic, at first there is no power out [expected since I haven't started talking], after I say something the power remains at 5watts even when I stop talking. [Doesn't seem to be a PTT issue; since release the PTT does return the radio to recieve and once there the issue will again repeat it self on a voice peak]. This behavior does not occur when I use the dummy load [power out goes to zero with no input]. Not sure I want to know what my transmitted spectrum looked like but despite this I was able to have a nice QSO into Virginia [from upstate NY]. Not bad for 5 watts.

The board is still loose in 1/2 of the case and I admit the microphone cable and ptt are a bit hacked up [eg the audio cable shield isn't continuous between the rig and the microphone because of a splice in the middle]. I suspect that RF is getting back into the microphone input somewhere and causing an oscillation to begin.

Any thoughts? Would sure like to have a known working board before investing any energy on making a nicer microphone and drilling out the case etc.

-- Matthew Schiller, KD6BWE

69. One more finished!

Yahoo group: mmr40owngrp
Date: 2007-04-16 11:15:26 UTC
From: Tim O'Rourke
Topic: 69 Message: 69

I also finished mine this weekend. All works FB. Had to scratch my head while using spectogram to set filter but then I realized the narrow filter is setting done with a opamp audio filter not in the crystal filter.
Anyone know how to accuratley measure the BFO frequency with out loading it down? I want to add one of Steve's frequency displays and I need to measure the BFO frequency accurately, when I use my freq counter it changes the BFO.
I also am looking at using an RF speach processor I have laying around for SSB. I have to find the doc's before I start.
73 Tim W4YN

70. Re: [mmr40owngrp] One more finished!

Yahoo group: mmr40owngrp
Date: 2007-04-16 13:01:51 UTC
From: JWells6391@aol.com
Topic: 69 Message: 70

Tim;

Use a 4.7pf cap in series with the counter probe.

Hope this helps.

John
KI4KWM

********** See what's free at http://www.aol.com.

71. Re: One more finished!

Yahoo group: mmr40owngrp
Date: 2007-04-16 15:47:50 UTC
From: Tim O'Rourke
Topic: 69 Message: 71

-
TNX John
Where is ur QTH maybe we can work in a QSO?
Are u using one of Steve's readouts in urs?
What was the final tuning range on the PTO when u were finished?
I am still a little high 3.072 even with the windings on L2 pushed up
tight. If I remember adding a couple of turns to PTO may lower the
freq also.

Tim
-- In mmr40owngrp@yahoogroups.com, JWells6391@... wrote:
>
> Tim;
>
> Use a 4.7pf cap in series with the counter probe.
>
> Hope this helps.
>
> John
> KI4KWM
>
>
>
> ********** See what's free at
http://www.aol.com.
>

72. Re: [mmr40owngrp] Re: One more finished!

Yahoo group: mmr40owngrp
Date: 2007-04-16 18:28:17 UTC
From: JWells6391@aol.com
Topic: 69 Message: 72

Yes, Tim,
My QTH is Cheraw, SC...out in the "boonies" of 4-land.
I'm using one of Steve's dials. I bought several of them for upcoming projects. This is the one with only one tactile switch. It's simple and elegant. Seems to suit this rig. I haven't noticed any noise in the receiver from it, so I didn't do any filtering on the V+ lead.
My MMR-40 tunes from 7.019 to 7.260 (L2=2.981 to 2.74) . When I first tested the PTO initially, it was high in freq.(3.084) What a pain it was to remove and adjust the # of turns. But that's what put me in the ballpark.

I really like this little rig. I looked in my junkbox and have found the parts for a speech processor to go with the Mic. It's a N1HFX design and uses an LM1458, an MPF102 and a 2N3904. I'm building it manhattan style as I built the keyer. Guess I will mount it and the Mic element in an altoids tin...if it sounds "tinny", well..... :-)

Good luck with your rig!

KI4KWM

********** See what's free at http://www.aol.com.

73. Web Page Up

Yahoo group: mmr40owngrp
Date: 2007-04-17 00:58:30 UTC
From: Bob Miller
Topic: 73 Message: 73

Just thought I would let everyone know, I put up a small page at:

http://www.wb6kwt.com/mmr40.htm

It's not much but does show what I've done. The site is running on my server here at home and is on a DSL line so it may be a little slow at times. There are a few pictures so if you're on dial up it may be a problem.

I haven't done anything about putting a label on the panels yet, been thinking about putting the rig in another enclosure.

Bob
wb6kwt

74. RE: [mmr40owngrp] Web Page Up

Yahoo group: mmr40owngrp
Date: 2007-04-17 01:43:06 UTC
From: Rob May
Topic: 73 Message: 74

Thanks Bob for putting that up. I'm that close (holds thumb and index finger really close together) to ordering an FCC-2. OT: Are you using DynDns or some other service to point to your IP or do you have a static IP. I've been thinking of setting up a server here after being burned by more than one cheap hosting outfit. I can't afford the big bucks for a real webhost, but I do have an extra computer that I run Mandriva on that I could set up as a webserver on my dsl line.
Rob
NV5E

>From: "Bob Miller" <wb6kwt@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Web Page Up
>Date: Tue, 17 Apr 2007 00:58:30 -0000
>
>Just thought I would let everyone know, I put up a small page at:
>
>http://www.wb6kwt.com/mmr40.htm
>
>It's not much but does show what I've done. The site is running on my
>server here at home and is on a DSL line so it may be a little slow at
>times. There are a few pictures so if you're on dial up it may be a
>problem.
>
>I haven't done anything about putting a label on the panels yet, been
>thinking about putting the rig in another enclosure.
>
>Bob
>wb6kwt
>

The average US Credit Score is 675. The cost to see yours: $0 by Experian.
http://www.freecreditreport.com/pm/default.aspx?sc=660600&bcd=EMAILFOOTERAVERAGE

75. RE: [mmr40owngrp] Web Page Up

Yahoo group: mmr40owngrp
Date: 2007-04-17 02:13:50 UTC
From: Bob Miller
Topic: 73 Message: 75

Rob,

I'll make this short as it's OT. I use a program called DynSite to keep my IP updated the DNS server is EasyDNS, as I recall, hardly every have to go there. Send me priviate email if you want more info. Running Apache and it's been up for over two years with no problems at all.

Bob
wb6kwt
-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On Behalf Of Rob May
Sent: Monday, April 16, 2007 6:43 PM
To: mmr40owngrp@yahoogroups.com
Subject: RE: [mmr40owngrp] Web Page Up

Thanks Bob for putting that up. I'm that close (holds thumb and index finger really close together) to ordering an FCC-2. OT: Are you using DynDns or some other service to point to your IP or do you have a static IP.
I've been thinking of setting up a server here after being burned by more than one cheap hosting outfit. I can't afford the big bucks for a real webhost, but I do have an extra computer that I run Mandriva on that I could
set up as a webserver on my dsl line.
Rob
NV5E

>From: "Bob Miller" <wb6kwt@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Web Page Up
>Date: Tue, 17 Apr 2007 00:58:30 -0000
>
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>
>http://www.wb6kwt.com/mmr40.htm
>
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>times. There are a few pictures so if you're on dial up it may be a
>problem.
>
>I haven't done anything about putting a label on the panels yet, been
>thinking about putting the rig in another enclosure.
>

>Bob
>wb6kwt
>

_____
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http://www.freecreditreport.com/pm/default.aspx?sc=660600&bcd=EMAILFOOTERA
VERAGE

76. MMR-40-520

Yahoo group: mmr40owngrp
Date: 2007-04-17 20:50:57 UTC
From: Tom
Topic: 76 Message: 76

I just posted two photos of my MMR-40 mounted in an old TS-520 remote VFO housing. Used a DataKit (j-Tron) 80M VFO rewound to cover 2.700-3.000MHz with the tuning pot driven by the Kenwood reduction gear train. The RIT push on/push off button is used for CW/SSB filter selection and VFO frequency range switching via extra padding cap. RIT knob on right acts as wide tuning range and main knob is fine tuning with about 50kHz from end to end. The Elecraft AF-1 audio filter is fantastic with a narrow 100Hz@-6db passband and the normally slow tuning rate of the Kenwood dial seems just right for such a narrow passband.

Not seen is the Elecraft T1 auto-tuner/wattmeter/swr-meter which attaches via a right angle connection to the BNC at the back of the VFO.

My first 6 QSO's with the rig yielded four Europeans, one VK and one W8 in Florida. Fun radio.

I do notice a bit of intermod from the high power broadcasters when running the three element wire yagi pointing to Europe. With the dipole or groundplane no out of band broadcasts are heard.

A local friend mentioned that there is the slightest musical note on the signal. Nowhere near a chirp but a critical ear may notice it. I suspect it is due to the fact that I am not using the internal VFO of the MMR-40 but can't be sure of the cause. The DataKit VFO is regulated and double buffered. I'm not worried about it as it is barely discernable.

Can hardly wait to get my QBSA digital readout working. I'm stumped as to why it won't work..just powers up and reads all 8's. I may have to send it to Steve and beg him to look it over.

I'll be putting this on the air for the CQ-WPX contest next month.

-Tom K2TA

77. Re: Electric mic elements

Yahoo group: mmr40owngrp
Date: 2007-04-17 20:52:47 UTC
From: Tom
Topic: 53 Message: 77

--- In mmr40owngrp@yahoogroups.com, "KF4YYD" <kf4yyd@...> wrote:
>
> Cross Posting with permission:
>
>
> I saw in the MMR-40 manual that an electret mike is needed for this
> rig. I have some small Electret elements (about the size of a #2 pencil
> eraser in diameter) that I would be happy to send out free to anyone if
> you send me an addressed stamped envelope. The manufacturer of them is
> Hoisiden and they are new parts.
>
> Chris
> KD4PBJ
>
> I emailed Chris and asked him if I could post this here, he told me he
> had several hundred of them, and my wife thinks I'm a pack rat HA!
>
> 73's de Tom
>

Hi Chris -

You are sending me an element....can I offer you my unopened MMR-40
plastic cabinet and front/back panels for you in return? I don't need
it now that my radio is inside the TS-520 VFO box.

-Tom K2TA

78. First SSB QSO

Yahoo group: mmr40owngrp
Date: 2007-04-19 04:04:05 UTC
From: Tim O'Rourke
Topic: 78 Message: 78

I lashed up a $1 mic surplus from ATT and made several contacts Chicago, New England and west coast. Had excellant reports, tnx Steve for FB rig! Audio reports indicated natural audio no distortion. Now to finish up case for weekend backpack trip.
Tim W4YN

79. FCC1/2

Yahoo group: mmr40owngrp
Date: 2007-04-19 23:40:08 UTC
From: KF4YYD
Topic: 79 Message: 79

Well I went and ordered a FCC1/2 combo and the mailman delevered them to me today. Not having much luck getting anything done though. I need to send my MMR out to be calibrated but i can't find a Radio Shack in the area with the stupid little non-conductive dohickey that you use to mount the PA with. I'm looking because I no longer have the nylon screw.

I also need to get the DDS chip from Analog Devices, I swear between work and family I have zero me time.

Tom kf4yyd

80. LO frequency too high

Yahoo group: mmr40owngrp
Date: 2007-04-20 05:38:43 UTC
From: defunk99
Topic: 80 Message: 80

Just did initial smoke test. Good news: No smoke! Bad news: Local oscillator frequency is too high. With tuning screw bottomed out in PTO coil the lowest frequency I can get by squeezing L2 primary windings together is about 3.188 Mhz. What do I do now? Can I just rewind L2 with more turns in the primary? Any suggestions would be greatly appreciated.

Dennis N6PFJ

81. Re: LO frequency too high

Yahoo group: mmr40owngrp
Date: 2007-04-20 11:09:10 UTC
From: Tim O'Rourke
Topic: 80 Message: 81

You will have to rewind L1, at least 39 turns. Make the spacing as
tight as you can. I had some wire that was ever so slightly,
maybe .0005" smaller, that I used to get 39 turns on. With supplied
wire I could only get 35 due to spacing of tie down holes in plastic.
You can wind over the tie down hole near nearest front panel. I did
this on one rewind and added extra turns. I than removed one turn at a
time untill I had 3mHz with screw all the way in. The reason you do
this on side nearest front panel is the length of the nylon screw that
hoholds the form to rear nut lines up with the rear tie down hole
perfectly and any additional turns on that end would be beyond travel
of tuning screw.
Tim W4YN
--- In mmr40owngrp@yahoogroups.com, "defunk99" <defunk99@...> wrote:
>
> Just did initial smoke test. Good news: No smoke! Bad news: Local
> oscillator frequency is too high. With tuning screw bottomed out in
> PTO coil the lowest frequency I can get by squeezing L2 primary
> windings together is about 3.188 Mhz. What do I do now? Can I just
> rewind L2 with more turns in the primary? Any suggestions would be
> greatly appreciated.
>
> Dennis N6PFJ
>

82. RE: [mmr40owngrp] Re: LO frequency too high

Yahoo group: mmr40owngrp
Date: 2007-04-19 11:52:50 UTC
From: Bob Miller
Topic: 80 Message: 82

The other possability is you have L2 installed wrong. If you have
39 turns on L1 make sure the tap leads on L2 are going
to the proper pads. I crossed mine up and the PTO tuned high.

Bob
wb6kwt
-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On
Behalf Of Tim O'Rourke
Sent: Friday, April 20, 2007 4:09 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: LO frequency too high

You will have to rewind L1, at least 39 turns. Make the spacing as
tight as you can. I had some wire that was ever so slightly,
maybe .0005" smaller, that I used to get 39 turns on. With supplied
wire I could only get 35 due to spacing of tie down holes in plastic.
You can wind over the tie down hole near nearest front panel. I did
this on one rewind and added extra turns. I than removed one turn at a
time untill I had 3mHz with screw all the way in. The reason you do
this on side nearest front panel is the length of the nylon screw that
hoholds the form to rear nut lines up with the rear tie down hole
perfectly and any additional turns on that end would be beyond travel
of tuning screw.
Tim W4YN
--- In mmr40owngrp@yahoogroups.com, "defunk99" <defunk99@...> wrote:
>
> Just did initial smoke test. Good news: No smoke! Bad news: Local
> oscillator frequency is too high. With tuning screw bottomed out in
> PTO coil the lowest frequency I can get by squeezing L2 primary
> windings together is about 3.188 Mhz. What do I do now? Can I just
> rewind L2 with more turns in the primary? Any suggestions would be
> greatly appreciated.
>
> Dennis N6PFJ
>

83. RE: LO frequency too high

Yahoo group: mmr40owngrp
Date: 2007-04-20 12:31:30 UTC
From: Rob May
Topic: 80 Message: 83

Dennis I had the same problem. After I made sure that the feedback and primary leads of L2 were in the right holes, per Bob Miller's post, I figured out with help from the group that I did not have enough windings on L1. I only had 29 and needed 39. I was able to get all 39 turns between the stock holes, but it was tight. Push the windings together with a fingernail as you go along.
Rob
NV5E

>From: "defunk99" <defunk99@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] LO frequency too high
>Date: Fri, 20 Apr 2007 05:38:43 -0000
>
> Just did initial smoke test. Good news: No smoke! Bad news: Local
>oscillator frequency is too high. With tuning screw bottomed out in
>PTO coil the lowest frequency I can get by squeezing L2 primary
>windings together is about 3.188 Mhz. What do I do now? Can I just
>rewind L2 with more turns in the primary? Any suggestions would be
>greatly appreciated.
>
>Dennis N6PFJ
>
>
>

Need a break? Find your escape route with Live Search Maps.
http://maps.live.com/?icid=hmtag3

84. Mail has been good this week

Yahoo group: mmr40owngrp
Date: 2007-04-20 21:17:43 UTC
From: Thomas Butchers
Topic: 84 Message: 84

Man o man has the mail been good to me this week. First my FCC1/2 kit arrived and then today when I got home from work I found my HF Packer Amp kit.

The problem of course is that I have way to much to do so trying to find time to build is going to be tough. My wife volunteered me to install a paddle fan in her friend's home (thanks honey) and those things draw a major vacuum. I have never had one ever go in easy so there goes tomorrow; guess there is always Sunday.

"Beer is proof that God loves us and wants us to be happy." -Ben Franklin

--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.446 / Virus Database: 269.5.5/769 - Release Date: 4/19/2007 5:56 PM

85. Re: Mail has been good this week

Yahoo group: mmr40owngrp
Date: 2007-04-20 22:46:21 UTC
From: Garry
Topic: 84 Message: 85

--- In mmr40owngrp@yahoogroups.com, "Thomas Butchers" <kf4yyd@...>
wrote:
>
> Man o man has the mail been good to me this week. First my FCC1/2
kit
> arrived and then today when I got home from work I found my HF
Packer Amp
> kit.
>

I know the feeling. I had three different kits arrive this week and
none of them were the MMR-40. It only got mailed out on Monday so
with any luck, I can have the others up and running before it
arrives. I also have much other stuff to do but I am real good at
procrastinating when it comes to things like that.

Well I do cut the grass when its needed ha ha, but all else that Honey
wants may have to wait.

Garry/Ve7ajj

have fun.

86. Board completed

Yahoo group: mmr40owngrp
Date: 2007-04-21 06:28:35 UTC
From: Rob May
Topic: 86 Message: 86

My MMR #2 arrived Thursday and I just finished the board except for Q10. I can tune for 7.45V at the gate of Q10. Woohoooo! My MMR #1 would never tune up to more than about 3.8V. Tomorrow I'll put them on the bench and check them side by side to see why the first one falls short. An expensive way to troubleshoot but I had no other choice, I tried everything Steven suggested as well as tried everything my fellow group members offered up as well. Hopefully tomorrow I'll have an answer.
Rob
NV5E

_____
Need a break? Find your escape route with Live Search Maps.
http://maps.live.com/?icid=hmtag3

87. Re: Board completed

Yahoo group: mmr40owngrp
Date: 2007-04-21 14:29:12 UTC
From: KF4YYD
Topic: 86 Message: 87

Rob, hope you find the trouble, it will be interesting to see what is causing the malfunction. I am on my way to the post office to mail my board out to Steve Smith, hopefully my is built correctly and it tunes up easily.

BTW got the templates in the mail THANKS! :)

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "Rob May" <roblitespeed@...> wrote:
>
> My MMR #2 arrived Thursday and I just finished the board except for Q10. I
> can tune for 7.45V at the gate of Q10.

88. MMR-40 Pulling my hair out

Yahoo group: mmr40owngrp
Date: 2007-04-21 20:23:48 UTC
From: Rob May
Topic: 88 Message: 88

As previously posted, I can't get the transmitter in my MMR 40 to put out full power. Despite all the help from this group and KD1JV I could never get it to work right. So I figured that I'd buy another one, put it together and compare them side by side. I finished the board (except for Q10) last night. I checked everything this morning and I was getting over 7V at Q10. That's more like it, I thought, the first board would only get up to about 3.9V. I put in Q10, adjusted the bias per the instructions and am only getting 1.4 Watts out @ 250mA current draw. Also the voltage going to Q10 drops to 3.9 when I install it. I must be doing something fundamentally wrong. I have followed the biasing instructions to the letter, multiple times!

I've followed the RF path from the antenna back through Q10. Can someone tell me if this right, and if not, where it goes wrong. All voltages are measured with the built in RF voltage probe.

Q10 out: 37.5V
T5 out: 17.7V
L3 out: 30.4V
L4 out: 11.9V
BNC: 11.9V (using V*V/100 results in 1.42 watts, which agrees with the QSBA that it's hooked to)

I am grasping at straws now, I have two MMR's and I can't get anywhere near full output out of either one.
Thanks for your help.
Rob
NV5E

_____
The average US Credit Score is 675. The cost to see yours: $0 by Experian.
http://www.freecreditreport.com/pm/default.aspx?sc=660600&bcd=EMAILFOOTERAVERAGE

89. Re: MMR-40 Pulling my hair out

Yahoo group: mmr40owngrp
Date: 2007-04-22 17:39:44 UTC
From: Garry
Topic: 88 Message: 89

I'm not speaking from a position of experience here but I'm thinking that you might want to take a close look at the construction notes/ details. It would appear to me that your building is likely okay but my guess is that somewhere along the way you may have misinterpreted some instruction and in doing so you repeated the original misinterpretation on the second build. Does that sound possible?

I'm sure you were extremely cautious during the second build so I can't see you making a too obvious mistake. But as I said, I have not received my kit yet so I'm not speaking from experience.

I just recall building a Heathkit and having problems with it until I got my wife (a ham but a definite non-technical lady) to read through the step by step as I checked each step. She was able to assist me to realize, by answering her basic questions, where I had misinterpreted a procedure.

Perhaps doing something like that might help in your case as well?

I learned a long time back that on occasion the simple explanation required by the expert (or knowledgable person) in order to explain some trivial thing to the non-expert can trigger one to review a simple overlooked fact that is otherwise taken for granted. Been there done that on both sides of the equation.

Just a thought. I recently built a SW-40+ and the build went great with no issues. Then I built a (much less complex) SDR receiver that I still don't have working so I sympathize.

Garry/Ve7ajj

P.S. I'm getting pretty bald, at least on top. Maybe I've built one too many kits. hi hi

--- In mmr40owngrp@yahoogroups.com, "Rob May" <roblitespeed@...> wrote:
>
> As previously posted, I can't get the transmitter in my MMR 40 to put out
> full power. Despite all the help from this group and KD1JV I could never
> get it to work right. So I figured that I'd buy another one, put it
> together and compare them side by side. I finished the board (except for
> Q10) last night. I checked everything this morning and I was getting over

> 7V at Q10. That's more like it, I thought, the first board would
only get
> up to about 3.9V. I put in Q10, adjusted the bias per the
instructions and
> am only getting 1.4 Watts out @ 250mA current draw. Also the
voltage going
> to Q10 drops to 3.9 when I install it. I must be doing something
> fundamentally wrong. I have followed the biasing instructions to
the
> letter, multiple times!
>
> I've followed the RF path from the antenna back through Q10. Can
someone
> tell me if this right, and if not, where it goes wrong. All
voltages are
> measured with the built in RF voltage probe.
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> Q10 out: 37.5V
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> BNC: 11.9V (using V*V/100 results in 1.42 watts, which
agrees with
> the QSBA that it's hooked to)
>
> I am grasping at straws now, I have two MMR's and I can't get
anywhere near
> full output out of either one.
> Thanks for your help.
> Rob
> NV5E
>
> _____
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Experian.
> http://www.freecreditreport.com/pm/
default.aspx?sc=660600&bcd=EMAILFOOTERAVERAGE
>

90. Weekend Packbacking with MMR40

Yahoo group: mmr40owngrp
Date: 2007-04-23 18:28:37 UTC
From: Tim O'Rourke
Topic: 90 Message: 90

Gave out NC to quite a few MIchigan contesters this weekend. Used a low inverted V. Continue to suprise ops when I tell them it is QRP! The $1 mic I made works FB.
Tim W4YN

91. Re: MMR-40 Pulling my hair out

Yahoo group: mmr40owngrp
Date: 2007-04-24 00:49:57 UTC
From: KF4YYD
Topic: 88 Message: 91

Rob any luck with the rig yet??

-- In mmr40owngrp@yahoogroups.com, "Rob May" <roblitespeed@...> wrote:
>
> As previously posted, I can't get the transmitter in my MMR 40 to
put out
> full power. Despite all the help from this group and KD1JV I could
never
> get it to work right. So I figured that I'd buy another one, put
it
> together and compare them side by side. I finished the board
(except for
> Q10) last night. I checked everything this morning and I was
getting over
> 7V at Q10. That's more like it, I thought, the first board would
only get
> up to about 3.9V. I put in Q10, adjusted the bias per the
instructions and
> am only getting 1.4 Watts out @ 250mA current draw. Also the
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> to Q10 drops to 3.9 when I install it. I must be doing something
> fundamentally wrong. I have followed the biasing instructions to
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> letter, multiple times!
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> NV5E

>
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sc=660600&bcd=EMAILFOOTERAVERAGE
>

92. Re: MMR-40 Pulling my hair out

Yahoo group: mmr40owngrp
Date: 2007-04-24 01:28:38 UTC
From: Rob May
Topic: 88 Message: 92

Tom, I'm in Atlanta on a business trip. I think I know what's wrong and I'm chomping at the bit to get home and try it. The diagnosis was suggested by Steve Smith WB6TNL. I thought about what he said and it is the only thing that makes sense with the given symptoms. The more I thought about it, the more I'm sure he has correctly diagnosed the problem. A successful report (I hope!) and a full explanation will follow in a two or three days when I get home.
Rob
NV5E

Just so people don't think I'm a goofball and don't know what I'm doing. I have an AAS in Electronics and Telecommunication, a GROL, ISCET certified electronic tech.

A partial list of successfully built kits:
ATS-3A (2)
QSBA
SW-20+
SW-40+
RM-30
RM-40 (Frankenmite, now at 1.5 watts!)
HiMite-15
NE SCAF

>From: "KF4YYD" <kf4yyd@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Re: MMR-40 Pulling my hair out
>Date: Tue, 24 Apr 2007 00:49:57 -0000
>
>Rob any luck with the rig yet??
>
>-- In mmr40owngrp@yahoogroups.com, "Rob May" <roblitespeed@...> wrote:
> >
> > As previously posted, I can't get the transmitter in my MMR 40 to
>put out
> > full power. Despite all the help from this group and KD1JV I could
>never
> > get it to work right. So I figured that I'd buy another one, put
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>(except for
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> > the QSBA that it's hooked to)
> >
> > I am grasping at straws now, I have two MMR's and I can't get
>anywhere near
> > full output out of either one.
> > Thanks for your help.
> > Rob
> > NV5E
> >
> > _____
> > The average US Credit Score is 675. The cost to see yours: $0 by
>Experian.
> > http://www.freecreditreport.com/pm/default.aspx?
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>
>

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93. Re: LO frequency too high

Yahoo group: mmr40owngrp
Date: 2007-04-24 20:33:54 UTC
From: defunk99
Topic: 80 Message: 93

Thanks Guys! When I pulled and rewound L1, I counted turns as I
unwound the old windings. There were only 34 turns. I reinstalled L1
with 40 counted turns and was able to adjust the LO frequency to under
3.0 mhz. Now, I can't wait to finish alignment and get on the air.

Dennis
N6PFJ

lo

--- In mmr40owngrp@yahoogroups.com, "Rob May" <roblitespeed@...> wrote:
>
> Dennis I had the same problem. After I made sure that the feedback and
> primary leads of L2 were in the right holes, per Bob Miller's post, I
> figured out with help from the group that I did not have enough
windings on
> L1. I only had 29 and needed 39. I was able to get all 39 turns
between
> the stock holes, but it was tight. Push the windings together with a
> fingernail as you go along.
> Rob
> NV5E
>
>
> >From: "defunk99" <defunk99@...>
> >Reply-To: mmr40owngrp@yahoogroups.com
> >To: mmr40owngrp@yahoogroups.com
> >Subject: [mmr40owngrp] LO frequency too high
> >Date: Fri, 20 Apr 2007 05:38:43 -0000
> >
> > Just did initial smoke test. Good news: No smoke! Bad news: Local
> >oscillator frequency is too high. With tuning screw bottomed out in
> >PTO coil the lowest frequency I can get by squeezing L2 primary
> >windings together is about 3.188 Mhz. What do I do now? Can I just
> >rewind L2 with more turns in the primary? Any suggestions would be
> >greatly appreciated.
> >
> >Dennis N6PFJ
> >
> >
> >
>
> ____
> Need a break? Find your escape route with Live Search Maps.
> http://maps.live.com/?icid=hmtag3
>

94. transmitter problem still not solved

Yahoo group: mmr40owngrp
Date: 2007-04-26 03:25:46 UTC
From: Rob May
Topic: 94 Message: 94

I was sure that I had T4 and/or T5 wired wrong. I have had them in and out repeatedly checking with an ohm meter and they seemed right. I rewound both with two different colored magnet wire (green and red). Being careful of phase and wiring I put them back in. Still no difference. When I tune up with the procedure in the manual (PA bias and CW tone full ccw, adjust PA bias for 108mA on transmit, (88 +20) then adjust CW tone for max power) I get 1.1 watts out at about 225mA current on the power supply. I can turn the PA bias control fully clockwise and get 5+ watts out (about 1000mA) regardless of what the CW tone control is set at. This doesn't seem like a good way to do things! The manual says that when the PA is fully on it will draw all the current that it can, so I guess the PA is never fully turned on. It's too late for me to mess with it anymore tonight. Remember, I have two MMR-40's that are doing the exact same thing. I'm sure it's something I've done wrong, but whatever it is I've done it to both rigs. Everything measures per the manual until I put the PA transistor in, so it's something between the PA and the antenna.

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95. Re: transmitter problem still not solved

Yahoo group: mmr40owngrp
Date: 2007-04-26 11:05:11 UTC
From: Tim O'Rourke
Topic: 94 Message: 95

Are you sure your power supply is adequate? I have for gotten to switch from my low anp lab supply to a more robust supply for final checking on a few occasions.
Tim W4YN
--- In mmr40owngrp@yahoogroups.com, "Rob May" <roblitespeed@...> wrote:
>
> I was sure that I had T4 and/or T5 wired wrong. I have had them in and out
> repeatedly checking with an ohm meter and they seemed right. I rewound both
> with two different colored magnet wire (green and red). Being careful of
> phase and wiring I put them back in. Still no difference. When I tune up
> with the procedure in the manual (PA bias and CW tone full ccw, adjust PA
> bias for 108mA on transmit, (88 +20) then adjust CW tone for max power) I
> get 1.1 watts out at about 225mA current on the power supply. I can turn
> the PA bias control fully clockwise and get 5+ watts out (about 1000mA)
> regardless of what the CW tone control is set at. This doesn't seem like a
> good way to do things! The manual says that when the PA is fully on it will
> draw all the current that it can, so I guess the PA is never fully turned
> on. It's too late for me to mess with it anymore tonight. Remember, I have
> two MMR-40's that are doing the exact same thing. I'm sure it's something
> I've done wrong, but whatever it is I've done it to both rigs. Everything
> measures per the manual until I put the PA transistor in, so it's something
> between the PA and the antenna.
>
> ____
> Interest Rates NEAR 39yr LOWS! $430,000 Mortgage for $1,299/mo - Calculate
> new payment
> http://www.lowermybills.com/lre/index.jsp?sourceid=lmb-9632-19132&moid=14888

>

96. Re: transmitter problem still not solved

Yahoo group: mmr40owngrp
Date: 2007-04-26 22:46:59 UTC
From: KF4YYD
Topic: 94 Message: 96

Hey Rob,

Sorry to hear the rig is not working yet. It appears that mine is not doing well either. Since I don't have a way of doing the alignment I sent it out to Steve "Snort Rosin" Smith in California.

RIght now Steve say he doesn't think the PTO is doing its thing. It seems that I only got 31 turns on L1 which isn't good. Of course I was just following the directions which said not to try and count just fill up the space between the holes. My guess is that yes you do need to count and yes you do need to get 39 turns on the thing. I may have another torrid that i messed up on too; the one that has the 5 turn feedback loop, forget the number of that one.

Hope you can solve the problem and that we can have a QSO with them.

Tom kf4yyd

97. Re: transmitter problem still not solved

Yahoo group: mmr40owngrp
Date: 2007-04-27 00:16:09 UTC
From: Rob May
Topic: 94 Message: 97

Tom,
I've been trading emails with Steve about your radio and mine. On my second try, I was able to get 40 turns on L1 and it tuned to 2.98 MHz. My first try was 29 turns, 3.3 MHz. I hope to put some time in this weekend on the MMR-40, KD1JV is out of pocket for a month or so, so we're on our own! Let's hope both radios are working soon. I'm looking forward to more postings on the group as more people get their radios assembled.
Rob
NV5E

>From: "KF4YYD" <kf4yyd@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Re: transmitter problem still not solved
>Date: Thu, 26 Apr 2007 22:46:59 -0000
>
>Hey Rob,
>
>Sorry to hear the rig is not working yet. It appears that mine is not
>doing well either. Since I don't have a way of doing the alignment I
>sent it out to Steve "Snort Rosin" Smith in California.
>
>RIght now Steve say he doesn't think the PTO is doing its thing. It
>seems that I only got 31 turns on L1 which isn't good. Of course I was
>just following the directions which said not to try and count just fill
>up the space between the holes. My guess is that yes you do need to
>count and yes you do need to get 39 turns on the thing. I may have
>another torrid that i messed up on too; the one that has the 5 turn
>feedback loop, forget the number of that one.
>
>Hope you can solve the problem and that we can have a QSO with them.
>
>Tom kf4yyd
>

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98. Re: transmitter problem still not solved

Yahoo group: mmr40owngrp
Date: 2007-04-27 03:51:32 UTC
From: Garry
Topic: 94 Message: 98

I received my kit at the beginning of this week but I am so involved in another build that I can't set it down to have a go at the MMR-40 just yet. I have to thank you fellows that are ahead of me for pointing out things such as the number of turns on the pto etc. Your difficulties will no doubt be of great help to those of us that work more slowly or start later. I hope I can use the information to avoid the same issues as I hate having to troubleshoot. It always shows me how little I know.

Garry/Ve7ajj

.--- In mmr40owngrp@yahoogroups.com, "Rob May" <roblitespeed@...> wrote:
>
> Tom,
> I've been trading emails with Steve about your radio and mine. On my second
> try, I was able to get 40 turns on L1 and it tuned to 2.98 MHz. My first
> try was 29 turns, 3.3 MHz. I hope to put some time in this weekend on the
> MMR-40, KD1JV is out of pocket for a month or so, so we're on our own!
> Let's hope both radios are working soon. I'm looking forward to more
> postings on the group as more people get their radios assembled.
> Rob
> NV5E
>
>
> >From: "KF4YYD" <kf4yyd@...>
> >Reply-To: mmr40owngrp@yahoogroups.com
> >To: mmr40owngrp@yahoogroups.com
> >Subject: [mmr40owngrp] Re: transmitter problem still not solved
> >Date: Thu, 26 Apr 2007 22:46:59 -0000
> >
> >Hey Rob,
> >
> >Sorry to hear the rig is not working yet. It appears that mine is not
> >doing well either. Since I don't have a way of doing the alignment I
> >sent it out to Steve "Snort Rosin" Smith in California.
> >
> >RIght now Steve say he doesn't think the PTO is doing its thing. It
> >seems that I only got 31 turns on L1 which isn't good. Of course I

was
> >just following the directions which said not to try and count just
fill
> >up the space between the holes. My guess is that yes you do need to
> >count and yes you do need to get 39 turns on the thing. I may have
> >another torrid that i messed up on too; the one that has the 5 turn
> >feedback loop, forget the number of that one.
> >
> >Hope you can solve the problem and that we can have a QSO with
them.
> >
> >Tom kf4yyd
> >
>
> _____
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dyn1.html%3Fsplovr%3D866144
>

99. Re: transmitter problem still not solved

Yahoo group: mmr40owngrp
Date: 2007-04-27 04:13:26 UTC
From: sigcom1
Topic: 94 Message: 99

I probably should clarify some things. I found nothing so far in Tom's rig that would keep it from operating. There were a couple of small errors but none that anyone else hasn't made and nothing that would stop the PTO from oscillating. It just doesn't. Right now it's a mystery but not one that can't be solved.

FWIW, I think that if I were building an MMR I'd do the 5.0 Volt regulator and the PTO first then test and align it -before- continuing with the rest of the rig. I say that because if there is a problem that requires removing and replacing L1 it is a bear to do after T1 has been mounted to the board, especially when attempting to properly tighten the nylon screw and spacer/coil form. It is much easier to properly secure L1 if one can get a 'straight shot' at the screw with a screwdriver. The coil in Tom's rig is now nice and tight and the tuning screw is snug so that incidental mechanical movement should be minimized.

My opinion is that reducing such movement in the MMR PTO is important, especially if the rig is operated in a mobile or field environment.

That is all for the moment. More news as it transpires.

73.......Steve Smith WB6TNL
"Snort Rosin"

--- In mmr40owngrp@yahoogroups.com, "KF4YYD" <kf4yyd@...> wrote:
> I
> sent it out to Steve "Snort Rosin" Smith in California.
>
> RIght now Steve say he doesn't think the PTO is doing its thing.
It
> seems that I only got 31 turns on L1 which isn't good. Of course I
was
> just following the directions which said not to try and count just
fill
> up the space between the holes. My guess is that yes you do need
to
> count and yes you do need to get 39 turns on the thing. I may have
> another torrid that i messed up on too; the one that has the 5
turn
> feedback loop, forget the number of that one.

100. My MMR-40

Yahoo group: mmr40owngrp
Date: 2007-04-27 14:28:20 UTC
From: w7wel
Topic: 100 Message: 100

Hi folks, been reading about experiences with the build. It is great to share how the build went and the challenges that go with it.

First, the latest post from Steve, "Snort Rosin" contains what I think is a great tip on getting the PTO up and running before stuffing the board with other parts, just in case of difficulty later.

I did have a problem with that part of the circuit. Winding the toroid to get the orientation of the part on the board correctly CAN be done wrong. So, be sure to start winding in the right direction the FIRST time and you'll save some trouble. Just hold the empty toroid over the spot on the PC board and then you can visualize the correct winding direction and the toroid won't be "sideways" when complete. I ended up WRONG and had to rewind. Fortunately, Doug included plenty of wire for a couple of re-do's. I've previously built a couple of PTO's, homebrew style using ball point pen shells, such as found at motels and hotels, for the form. This part of the MMR-40 PTO is probably one of the most clever schemes for mechanical stability I've seen. Using those threaded nylon spacers and three nuts for mechanical alignment is a vast improvement over anything I've seen so far.

My next challenge, mentioned here before, was identifying the 5.1 zener. A different part number was substituted without mention and caused concern. I initally thought it was a substitute but of course wasn't sure. My main concern was getting the information out to future MMR-40 builders since I had a few known 5.1 zeners in the junk-box. Installing the little glass diodes in the right spots and oriented correctly has the potential for problems so, as the instructions imply, be DILLIGENT when installing them.

After getting the receiver working which includes setting he BFO for the most natural sounding audio on SSB. (Wow! What nice audio out of an external speaker. The case mounted speaker doesn't sound near as good.)

So, on the the transmitter... Darn thing seemed to be transmitting in both sidebands, in a ripple like fashion with tones ocurring every KC or so.. See the last ERRATA item on the list that Doug has posted for the cause and the cure. (The compromise on SSB low freq audio should not be a problem for us died in the wool CW ops!)

I've made many contacts since completing my MMR-40 and get good reports. The latest, being K4RGR, Jim in Sterling, VA. (RST 569) I was operating from the RAMADA INN parking lot in Joplin, MO. using a mag-mount fiberglass whip, the little NorCal tuner, altoids K3 keyer

and a NoGa SWR meter... I'm here to attend OZARKCON.. And enjoy using the MMR-40!

Good luck on your build.

Bill - W7WEL

101. 39 + turns on L1?

Yahoo group: mmr40owngrp
Date: 2007-04-27 23:34:54 UTC
From: Randal
Topic: 101 Message: 101

How on earth are you guys getting 40 turns on L1 without overlaps?
I have wound the darn'd thing half a dozen times and can only seem to
get 34 max.

72
Ran - W1IN

102. Re: 39 + turns on L1?

Yahoo group: mmr40owngrp
Date: 2007-04-28 00:39:13 UTC
From: KF4YYD
Topic: 101 Message: 102

--- In mmr40owngrp@yahoogroups.com, "Randal" <w1in@...> wrote:
>
> How on earth are you guys getting 40 turns on L1 without overlaps?
> I have wound the darn'd thing half a dozen times and can only seem to
> get 34 max.
>
> 72
> Ran - W1IN
>

Ran, not sure it appears i only got 31 on mine and its not working

Tom kf4yyd

103. RE: 39 + turns on L1?

Yahoo group: mmr40owngrp
Date: 2007-04-28 05:46:24 UTC
From: Rob May
Topic: 101 Message: 103

Randal,
First, be sure you are using the 32 gauge wire (the thinner of the two in the kit, I can only get 34 turns with the 30 gauge wire). Anchor the wire in the first hole as shown in the manual. Wrap about 5 turns, use your fingernail to push the wires together and as close to the first hole as possible. Keep wrapping a few turns at a time and pushing them tight. Continue until you get to the end hole, continue wrapping over the hole until there is just enough room to get the wire through twice to anchor it on that end. I got 40 turns and I thing 41 is possible. It is tight, but definitely doable.
Rob
NV5E

>From: "Randal" <w1in@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] 39 + turns on L1?
>Date: Fri, 27 Apr 2007 23:34:54 -0000
>
>How on earth are you guys getting 40 turns on L1 without overlaps?
>I have wound the darn'd thing half a dozen times and can only seem to
>get 34 max.
>
>72
>Ran - W1IN
>

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104. Re: [mmr40owngrp] 39 + turns on L1?

Yahoo group: mmr40owngrp
Date: 2007-04-28 12:19:23 UTC
From: Bill Linn
Topic: 101 Message: 104

Are you using the smallest diameter wire that came with the Kit. I didn't count mine but did crowd the holes on each end. I think I read where someone went beyound the hole on the front end to add a few turns.

On Fri, 27 Apr 2007 16:34:54 -0700, Randal <w1in@...> wrote:

> How on earth are you guys getting 40 turns on L1 without overlaps?
> I have wound the darn'd thing half a dozen times and can only seem to
> get 34 max.
>
> 72
> Ran - W1IN
>
>
>
> Yahoo! Groups Links
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--
Using Opera's revolutionary e-mail client: http://www.opera.com/mail/

105. Re: 39 + turns on L1?

Yahoo group: mmr40owngrp
Date: 2007-04-28 12:25:40 UTC
From: sigcom1
Topic: 101 Message: 105

Ran,

Using #32 wire, if you can't get 40 turns then the spacing of the holes drilled in the hex spacer are incorrect. It's possible as it appears that they were drilled by hand.

FWIW, on Tom's rig I mananged to get 40 turns with room to spare.

If you can, please measure the spacing between the holes and let me know what it is. An accurate mesurement will probably require the use of a caliper.

73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "Randal" <w1in@...> wrote:
>
> How on earth are you guys getting 40 turns on L1 without overlaps?
> I have wound the darn'd thing half a dozen times and can only seem to
> get 34 max.
>
> 72
> Ran - W1IN
>

106. Re: 39 + turns on L1?

Yahoo group: mmr40owngrp
Date: 2007-04-28 13:18:56 UTC
From: Randal
Topic: 101 Message: 106

Steve,
You may have pointed me in the right direction. My kit had only one coil of magnet wire in it. I'll pick up a roll of #32 at Sunday's local hamfest.
TNX es 72,
Ran - W1IN

107. I got good news

Yahoo group: mmr40owngrp
Date: 2007-04-29 19:40:20 UTC
From: KF4YYD
Topic: 107 Message: 107

Well i got some good news today. Steve Smith who has my radio out in California contacted me to let me know that my MMR came to life. I don't think anyone is 100% sure what the problem was as to why my PTO didn't oscillate but after removing and re-windind L2 it started working just fine. I also was told that it is hearing very good so I'm happy! Looks like another one is in the Done catagory.

Tom kf4yyd

108. MMR receiver

Yahoo group: mmr40owngrp
Date: 2007-04-30 03:25:26 UTC
From: sigcom1
Topic: 108 Message: 108

I am impressed with the audio quality of the MMR receiver in SSB. Didn't mess around with it on CW, primarilly because of time constraints but also the band was really stinko at the time.

I've never been a big fan of LM386 audio amplifiers but Steve Weber seems to have tamed this one fairly well. The distortion is low and the level of internal noise (hiss) is fairly low.

I highly recommend using an external, communications grade speaker on the MMR. I had a 3.5" X 2" oval speaker from a cel phone hands-free car kit hung on Tom's radio for the testing. Any sort of Land Mobile type speaker should work well. The great thing about LM style speakers is that they usually have big magnets and are quite efficient so the LM386 doesn't have to be pushed so hard to make reasonable audio volume. I'm not sure the 2" speaker inside the MMR housing will do well. Maybe someone can comment.

I do have some comments regarding the PTO but I'll save them until I've tried a few mod's..

73.......Steve Smith WB6TNL
"Snort Rosin"

109. LM speakers

Yahoo group: mmr40owngrp
Date: 2007-04-30 19:35:00 UTC
From: sigcom1
Topic: 108 Message: 109

I should clarify what I meant by "Land Mobile" speaker. I'm referring to a speaker assembly (loudspeaker element and housing) that has been manufactured to taylor the frequency response to the voice band and attenuate frequencies above and below that range.

The rectangular surplus speakers that were meant for vehicular cellular phone use and show up on the surplus market are generally quite good.

Even better are the 5" accessory speakers that were sold by Motorola and E.F. Johnson as mobile radio accessory speakers. Many of those are 4 Ohms nom. but some are 8 Ohm so beware when buying them.

73.......Steve Smith WB6TNL

110. Re: LM speakers

Yahoo group: mmr40owngrp
Date: 2007-04-30 20:35:08 UTC
From: KF4YYD
Topic: 108 Message: 110

Steve,

Thanks for the info on speakers, i was debating on wether or not to even put in the kit speaker or just have a jack for an external speaker. Or better yet put in the kit speaker and mod it for a jack to select which one to use in case you take it mobile.

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "sigcom1" <sigcom@...> wrote:
>
> I should clarify what I meant by "Land Mobile" speaker. I'm referring
> to a speaker assembly (loudspeaker element and housing) that has been
> manufactured to taylor the frequency response to the voice band and
> attenuate frequencies above and below that range.
>
> The rectangular surplus speakers that were meant for vehicular cellular
> phone use and show up on the surplus market are generally quite good.
>
> Even better are the 5" accessory speakers that were sold by Motorola
> and E.F. Johnson as mobile radio accessory speakers. Many of those are
> 4 Ohms nom. but some are 8 Ohm so beware when buying them.
>
> 73.......Steve Smith WB6TNL
>

111. FS 2 MMR-40's

Yahoo group: mmr40owngrp
Date: 2007-04-30 23:25:35 UTC
From: Rob May
Topic: 111 Message: 111

Many of you have read of my trials with this rig. It's time to move on. I never could get full power out of either one. I bought the second one so I could build it and troubleshoot the first one, however, it had the same problems.

Here is a description of each:
1. I've had multiple parts in and out of this one, so the board looks a little rough in places. I pulled up a solder pad on Q14 when I replaced it. I soldered a tiny piece of magnet wire from the hole to the trace on top, hard to see and would only be an issue if you ever needed to replace it. While poking around looking for the cause of the low output power I somehow messed something up so that it draws about 80mA more on transmit with V4 and V3 fully off than it should. The receiver and PTO work great. The case is finished, but is no work of art, pictures of this one are on the MMR-40 Yahoo group website under Photos->NV5E. $65 shipped.

2. With a lot of tweaking I'm able to get almost 3.5 watts out of this one with the bias set as per the instructions. The board is complete but the case is still shrink wrapped. Except for the low power output, this one works great. $75 shipped.

This is way less that the $110 each that I paid for these, plus you don't have to build them. Just some troubleshooting. If you want both of them I'll make you a super special deal $120 shipped! Almost two for the price of one. I'm at my wits end with these. Warning, may cause you to pull your hair out!

Rob
NV5E

_____
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http://www.freecreditreport.com/pm/default.aspx?sc=660600&bcd=EMAILFOOTERAVERAGE

112. Re: LM speakers

Yahoo group: mmr40owngrp
Date: 2007-05-01 02:36:23 UTC
From: sigcom1
Topic: 108 Message: 112

Tom,

You're welcome.

I would recommend adding a closed-circuit jack on the back of the radio for an external wired such that it opens the line to the internal speaker.

In a quiet ambient environment the built-in speaker will probably be just fine but an external speaker will really outshine it.

73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "KF4YYD" <kf4yyd@...> wrote:
>
> Steve,
>
> Thanks for the info on speakers, i was debating on wether or not to
> even put in the kit speaker or just have a jack for an external
> speaker. Or better yet put in the kit speaker and mod it for a jack to
> select which one to use in case you take it mobile.
>
> Tom kf4yyd
>
> --- In mmr40owngrp@yahoogroups.com, "sigcom1" <sigcom@> wrote:
> >
> > I should clarify what I meant by "Land Mobile" speaker. I'm referring
> > to a speaker assembly (loudspeaker element and housing) that has been
> > manufactured to taylor the frequency response to the voice band and
> > attenuate frequencies above and below that range.
> >
> > The rectangular surplus speakers that were meant for vehicular
> > cellular
> > phone use and show up on the surplus market are generally quite good.
> >
> > Even better are the 5" accessory speakers that were sold by Motorola
> > and E.F. Johnson as mobile radio accessory speakers. Many of those
> > are

> > 4 Ohms nom. but some are 8 Ohm so beware when buying them.
> >
> > 73.......Steve Smith WB6TNL
> >
>

113. L2 Clarification

Yahoo group: mmr40owngrp
Date: 2007-05-02 02:51:34 UTC
From: kd4pbj
Topic: 113 Message: 113

Hi Guys,

I wound L2 as specified in the instructions. I wound the 28 turns, made a tap, and wound 5 more. I am a little unclear about which feedback (tap) wire solders to where. I see two pads marked F on the board, and I want to get the phasing right. Could someone please clarify the instructions as to which wire of L2 solders to which pad. Thanks.

Chris
KD4PBJ

114. Re: L2 Clarification

Yahoo group: mmr40owngrp
Date: 2007-05-02 03:22:02 UTC
From: sigcom1
Topic: 113 Message: 114

Chris,

If the coil is wound correctly, the leads basically fall into place.

If the windings are on the toroid 'backwards', the only way the coil will fit with the leads straight down is with the toroid cross-wise to the pattern on the board. It -should- still work OK but don't take my word for it because the last thing I did to Tom's radio was to re-wind the coil so that the toroid was lined up with the pattern on the board. Before that the PTO wouldn't oscillate even though I checked the leads and the windings six ways from Sunday. What a fight that was. I even had another set of eyes check it out and he agreed that it should work, but it woulnd't.

Best of luck with your kit. Keep us posted on your progress.

73.......Steve Smith WB6TNL
"Snort Rosin"

--- In mmr40owngrp@yahoogroups.com, "kd4pbj" <kd4pbj@...> wrote:
>
> Hi Guys,
>
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> clarify the instructions as to which wire of L2 solders to which
pad.
> Thanks.
>
> Chris
> KD4PBJ
>

115. Re: L2 Clarification

Yahoo group: mmr40owngrp
Date: 2007-05-02 13:20:26 UTC
From: KF4YYD
Topic: 113 Message: 115

Hi Chris,

The feedback windings go into the holes marked 'F'. If you are curious as to what one that is wound backwards looks like you can look at the photo of my board in the photos file. You'll see what Steve is saying about the torrid sitting cross-ways. I am not the most knowledgable person about winding torrids and always wind mine counter-clockwise while lookig at it, so maybe I need to change how I wind them. Does anybody here know if you are supposed to wind them clock-wise?

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "kd4pbj" <kd4pbj@...> wrote:
>
> Hi Guys,
>
> I wound L2 as specified in the instructions. I wound the 28 turns,
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> feedback (tap) wire solders to where. I see two pads marked F on the
> board, and I want to get the phasing right. Could someone please
> clarify the instructions as to which wire of L2 solders to which
pad.
> Thanks.
>
> Chris
> KD4PBJ
>

116. RE: [mmr40owngrp] Re: L2 Clarification

Yahoo group: mmr40owngrp
Date: 2007-05-02 13:29:06 UTC
From: Alverson, Tom (Xetron)
Topic: 113 Message: 116

When I first wound my oscillator toroid, the only way to make it fit without crossing the wires was to rotate it 90 degress. It did not oscillate at all. I rewound the toriod in the opposite direction and now the wires line up with the holes with no problem (and it oscillates). The only problem now is that I did not get a full 39 turns on the PTO coil so the frequency is a little off.

73 de Tom NU8D

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On Behalf Of KF4YYD
Sent: Wednesday, May 02, 2007 9:20 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: L2 Clarification

Hi Chris,

The feedback windings go into the holes marked 'F'. If you are curious as to what one that is wound backwards looks like you can look at the photo of my board in the photos file. You'll see what Steve is saying about the torrid sitting cross-ways. I am not the most knowledgable person about winding torrids and always wind mine counter-clockwise while lookig at it, so maybe I need to change how I wind them. Does anybody here know if you are supposed to wind them clock-wise?

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com <mailto:mmr40owngrp%40yahoogroups.com> , "kd4pbj" <kd4pbj@...> wrote:
>
> Hi Guys,
>
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> board, and I want to get the phasing right. Could someone please
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pad.
> Thanks.
>
> Chris
> KD4PBJ
>

117. Re: L2 Clarification

Yahoo group: mmr40owngrp
Date: 2007-05-02 14:43:24 UTC
From: sigcom1
Topic: 113 Message: 117

Tom,

I does not matter in which direction the wire is wound onto a
toroid. In the case of L2, it only matters that the phase of the
feedback from the 5-turn winding is correct, otherwise the circuit
won't oscillate. That must be what happens when the coil is
installed 90 degrees to the PC board marking but it sure looks
correct electrically. The clue here that it is true is Tom NU8D's
report that his also did not oscillate when installed the same as
yours was. Interesting.

73.......Steve Smith WB6TNL
"Snort Rosin"

--- In mmr40owngrp@yahoogroups.com, "KF4YYD" <kf4yyd@...> wrote:
> I am not the most knowledgable
> person about winding torrids and always wind mine counter-
clockwise
> while lookig at it, so maybe I need to change how I wind them.
Does
> anybody here know if you are supposed to wind them clock-wise?
>
> Tom kf4yyd

118. RE: [mmr40owngrp] Re: L2 Clarification

Yahoo group: mmr40owngrp
Date: 2007-05-02 15:18:33 UTC
From: Alverson, Tom (Xetron)
Topic: 113 Message: 118

In both cases, I had the feedback winding going in the same direction as the other windings. When I first tried to put in on the board and had to rotate it, I figured it was 50/50 whether it would work or not. I might have been able to just reverse the feedback windings but that would have made the "fit" even worse so I rewound both windings in the other direction.

Tom

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]
On Behalf Of sigcom1
Sent: Wednesday, May 02, 2007 10:43 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: L2 Clarification

Tom,

I does not matter in which direction the wire is wound onto a toroid. In the case of L2, it only matters that the phase of the feedback from the 5-turn winding is correct, otherwise the circuit won't oscillate. That must be what happens when the coil is installed 90 degrees to the PC board marking but it sure looks correct electrically. The clue here that it is true is Tom NU8D's report that his also did not oscillate when installed the same as yours was. Interesting.

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<mailto:mmr40owngrp%40yahoogroups.com> , "KF4YYD" <kf4yyd@...> wrote:
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> while lookig at it, so maybe I need to change how I wind them.
Does
> anybody here know if you are supposed to wind them clock-wise?
>
> Tom kf4yyd

119. Re: L2 Clarification

Yahoo group: mmr40owngrp
Date: 2007-05-02 15:24:01 UTC
From: sigcom1
Topic: 113 Message: 119

Yup, that's identical to the situation I ran into with Tom's radio.
Both windings in the same same direction both times just 'backwards'
initially. As soon as I get the chance, I will look closer to see
if I can figure out if that changed the phase.

73.......Steve Smith WB6TNL
"Snort Rosin"

--- In mmr40owngrp@yahoogroups.com, "Alverson, Tom \(Xetron\)"
<tom.alverson@...> wrote:
>
> In both cases, I had the feedback winding going in the same
direction as
> the other windings. When I first tried to put in on the board and
had
> to rotate it, I figured it was 50/50 whether it would work or
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> might have been able to just reverse the feedback windings but that
> would have made the "fit" even worse so I rewound both windings in
the
> other direction.
>
> Tom
>
> _____
>
> From: mmr40owngrp@yahoogroups.com
[mailto:mmr40owngrp@yahoogroups.com]
> On Behalf Of sigcom1
> Sent: Wednesday, May 02, 2007 10:43 AM
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] Re: L2 Clarification
>
>
>
> Tom,
>
> I does not matter in which direction the wire is wound onto a
> toroid. In the case of L2, it only matters that the phase of the
> feedback from the 5-turn winding is correct, otherwise the circuit
> won't oscillate. That must be what happens when the coil is
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> --- In mmr40owngrp@yahoogroups.com
> <mailto:mmr40owngrp%40yahoogroups.com> , "KF4YYD" <kf4yyd@> wrote:
> > I am not the most knowledgable
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> clockwise
> > while lookig at it, so maybe I need to change how I wind them.
> Does
> > anybody here know if you are supposed to wind them clock-wise?
> >
> > Tom kf4yyd
>

120. RE: [mmr40owngrp] L2 Clarification

Yahoo group: mmr40owngrp
Date: 2007-05-02 15:36:01 UTC
From: Rob May
Topic: 113 Message: 120

In general it doesn't matter which direction wire is wound onto a toriod, but in this case it does. Since L1 is in series with L2 they need be in phase. I'm sure this is why L2's that have to be mounted sideways won't oscillate. The problem is not that the toroid is mounted sideways, it's the fact that the direction of the winding forces it to be that way. If L2 is wound is correctly, it will sit correctly on the board with the feedback and main windings falling "naturally" into the correct holes. No leads should be crossed.
Rob
NV5E

>From: "Alverson, Tom (Xetron)" <tom.alverson@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: <mmr40owngrp@yahoogroups.com>
>Subject: RE: [mmr40owngrp] Re: L2 Clarification
>Date: Wed, 2 May 2007 11:18:33 -0400
>
>In both cases, I had the feedback winding going in the same direction as
>the other windings. When I first tried to put in on the board and had
>to rotate it, I figured it was 50/50 whether it would work or not. I
>might have been able to just reverse the feedback windings but that
>would have made the "fit" even worse so I rewound both windings in the
>other direction.
>
>Tom
>
>_____
>
>From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]
>On Behalf Of sigcom1
>Sent: Wednesday, May 02, 2007 10:43 AM
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Re: L2 Clarification
>
>
>
>Tom,
>
>I does not matter in which direction the wire is wound onto a
>toroid. In the case of L2, it only matters that the phase of the
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>installed 90 degrees to the PC board marking but it sure looks
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> > Tom kf4yyd
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>
>
>

_____
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121. L2 Clarification- Oscillator is oscillating

Yahoo group: mmr40owngrp
Date: 2007-05-03 01:25:32 UTC
From: Chris Waldrup
Topic: 121 Message: 121

I got the oscillator portion (only) of the PCB assembled. I did insert the 78L05 and associated capacitors, power connector and Shottky diode.
I soldered a test point in the hole for U6, pin 6 (OSC input to the mixer) and mounted the 22 pF cap to ground that is called for in the schematic. But nothing more- I am going stepwise as I read about in one of the earlier posts. U6 has not been mounted yet.

Here are my measurements with my scope and counter:

Brass Screw fully out 2.8134Mhz, 1.4V p-p
Brass Screw fully in 2.953 Mhz, 1 V p-p

other switch setting (CW-SSB Switch):

Brass Screw fully out 2.693 Mhz, 1.3V p-p
Brass Screw fully in 2.820 Mhz, 1 V p-p

I wound L2 exactly as described, but did have to cross one of the feedback wires (the one facing the outside of the board) with one of the primary windings. It still worked.

Is this consistent with what others are getting? Thanks for the feedback, you guys are great!

Chris
KD4PBJ
Raleigh, NC

----- Original Message -----
From: sigcom1
To: mmr40owngrp@yahoogroups.com
Sent: Tuesday, May 01, 2007 11:22 PM
Subject: [mmr40owngrp] Re: L2 Clarification

Chris,

If the coil is wound correctly, the leads basically fall into place.

If the windings are on the toroid 'backwards', the only way the coil will fit with the leads straight down is with the toroid cross-wise to the pattern on the board. It -should- still work OK but don't take my word for it because the last thing I did to Tom's radio was to re-wind the coil so that the toroid was lined up with the pattern on the board. Before that the PTO wouldn't oscillate even though I checked the leads and the windings six ways from Sunday. What a fight that was. I even had another set of eyes check it out and he agreed that it should work, but it woulnd't.

Best of luck with your kit. Keep us posted on your progress.

73.......Steve Smith WB6TNL
"Snort Rosin"

--- In mmr40owngrp@yahoogroups.com, "kd4pbj" <kd4pbj@...> wrote:
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the
> board, and I want to get the phasing right. Could someone please
> clarify the instructions as to which wire of L2 solders to which
pad.
> Thanks.
>
> Chris
> KD4PBJ
>

122. Re: L2 Clarification- Oscillator is oscillating

Yahoo group: mmr40owngrp
Date: 2007-05-03 02:18:53 UTC
From: sigcom1
Topic: 121 Message: 122

Hi Chris, glad to hear you got your PTO going. Everything looks good except that if you want the radio to cover down to the bottom of the band (7.000 MHz) then you need to get your frequency up to 3.000 MHz.

You can remove turns from either L1 or L2 to raise the upper limit.

Best of luck with your kit.

73.......Steve Smith WB6TNL
"Snort Rosin"

--- In mmr40owngrp@yahoogroups.com, "Chris Waldrup" <kd4pbj@...> wrote:
>
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> other switch setting (CW-SSB Switch):
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> Is this consistent with what others are getting? Thanks for the feedback, you guys are great!
>
> Chris
> KD4PBJ
> Raleigh, NC

123. RE: [mmr40owngrp] L2 Clarification- Oscillator is oscillating

Yahoo group: mmr40owngrp
Date: 2007-05-03 02:32:18 UTC
From: Rob May
Topic: 121 Message: 123

Those are good numbers Chris. You might want to play with the windings on L2 to get the frequency a little closer to 3 MHz. Remember the operating frequency is BFO - LO, so 10.000 - 2.953 = 7.047 MHz, just above the QRP CW calling frequency. If worse comes to worse, you could take a turn of of L1.
Rob
NV5E

>From: "Chris Waldrup" <kd4pbj@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: <mmr40owngrp@yahoogroups.com>
>Subject: [mmr40owngrp] L2 Clarification- Oscillator is oscillating
>Date: Wed, 2 May 2007 21:25:32 -0400
>
>I got the oscillator portion (only) of the PCB assembled. I did insert the
>78L05 and associated capacitors, power connector and Shottky diode.
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>Chris
>KD4PBJ
>Raleigh, NC
>
>
> ----- Original Message -----
> From: sigcom1
> To: mmr40owngrp@yahoogroups.com

> Sent: Tuesday, May 01, 2007 11:22 PM
> Subject: [mmr40owngrp] Re: L2 Clarification
>
>
> Chris,
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>

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124. Re: [mmr40owngrp] LM speakers

Yahoo group: mmr40owngrp
Date: 2007-05-03 15:58:25 UTC
From: Bill Linn
Topic: 108 Message: 124

Steve, thanks for the additional information on the LM speakers.

Some of you guys are getting older, like me, and your hearing isn't as acute as it used to be so it makes sense to perk up the MMR's audio when we can. I installed a jack in the back of the rig that switches out the internal speaker when a plug is inserted. I had a couple of surplus amplified computer speakers in the small white plastic enclosures. I gutted the enclosure, leaving only the speaker and it was a very significant improvement over the internal speaker.

I attended OzarkCon this year and won't be home until late this month, but when I do, I'll be putting the MMR in a larger enclosure to house a better speaker and a frequency read-out plus a PK-3 keyer. (Will post photos) In the meantime, I'm enjoying the use of the MMR while on the road. I'm at Mountainview, AR for the remainder of this week and have a G5RV in a tree alongside the cabin so listen around the watering hole, perhaps we can hook up.

Bill - W7WEL

On Mon, 30 Apr 2007 12:35:00 -0700, sigcom1 <sigcom@...> wrote:

> I should clarify what I meant by "Land Mobile" speaker. I'm referring
> to a speaker assembly (loudspeaker element and housing) that has been
> manufactured to taylor the frequency response to the voice band and
> attenuate frequencies above and below that range.
>
> The rectangular surplus speakers that were meant for vehicular cellular
> phone use and show up on the surplus market are generally quite good.
>
> Even better are the 5" accessory speakers that were sold by Motorola
> and E.F. Johnson as mobile radio accessory speakers. Many of those are
> 4 Ohms nom. but some are 8 Ohm so beware when buying them.
>
> 73.......Steve Smith WB6TNL
>
>
>
>
>
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>
>

--
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125. Need more time

Yahoo group: mmr40owngrp
Date: 2007-05-03 20:48:50 UTC
From: Thomas Butchers
Topic: 125 Message: 125

Not to mention I need more test equipment. I received my DDS chip from Analog Devices for my FCC-2 the other day. I finally looked at the thing and decided I wasn't going to even attempt it so it will be going out to kit builders to put together. It seems like everything I build is making its way out to California, something wrong there. I almost have the FCC-1 completed, it just needs the switches installed and the one IC that is soldered straight to the board; and then of course I need to figure out how to align the damn thing. What I wouldn't do for the proper test equipment.

I also have my HF packer amp waiting in the wings, since my wife won't spring for an IC 746 Pro, or any other multi/band/mode radio I thought it would be nice for the MMR to have some extra punch. The only thing I'm not looking forward to there is the many torrids to wind (I'm the backwards wind guy). And finally how to incorporate this stuff into the now functioning MMR.....

Tom kf4yyd

"Beer is proof that God loves us and wants us to be happy." -Ben Franklin

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126. Re: Need more time

Yahoo group: mmr40owngrp
Date: 2007-05-04 20:02:32 UTC
From: sigcom1
Topic: 125 Message: 126

Well, the FCC-1 & 2 are a good start to your RF test equipment collection. You'll end up with a freq. counter and a signal generator. From there you could build a simple direct-conversion mixer followed by a simple audio amplifier. That, pumped by the FCC-2, would give you a basic general coverage receiver (if you don't already have one) for monitoring transmitters, WWV, etc.. An RF amplifier and preselector could easily be added later.

Do you currently have a way of listening to WWV? That is all you need to calibrate the FCC-1. You can probably get it within a couple of Hz just by using the beat note. \

FWIW, I would recommend housing the FCC-1 and 2 together as a stand-alone instrument instead of building them into the MMR. More flexible that way. But that's me :-).

73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "Thomas Butchers" <kf4yyd@...> wrote:
>
> Not to mention I need more test equipment. I received my DDS chip from
> Analog Devices for my FCC-2 the other day. I finally looked at the thing and
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> would be nice for the MMR to have some extra punch. The only thing I'm not
> looking forward to there is the many torrids to wind (I'm the backwards wind
> guy). And finally how to incorporate this stuff into the now functioning

> MMR.........
>
> Tom kf4yyd

127. It Lives

Yahoo group: mmr40owngrp
Date: 2007-05-04 22:21:06 UTC
From: Randal
Topic: 127 Message: 127

Wow the receiver is pretty darned good.

72,
Ran - W1IN

128. RE: [mmr40owngrp] Re: Need more time

Yahoo group: mmr40owngrp
Date: 2007-05-05 00:20:57 UTC
From: Thomas Butchers
Topic: 125 Message: 128

Hey Steve,

No way of hearing WWV or anything else, at the moment. Just came back inside after surveying the yard for the billionth time and am now wondering of I'm ever even going to get an antenna up through all the freaking leaves. They are all tall trees and at times I feel like I'm living inside the rain forest they are so dense. Then again let's not get me started on things like how do you zero beat my brain can only ingest so much before it starts to leak out my ears.

I agree with your recommendation; I just finished reading the article on the FCC-2 in QST and it appears that there is also a FCC-3 in the works. Wonder what that one does??

Of course I do realize that I am trying to play radio with my hands tied behind my back; one should probably not teleport back to the 1920's and try to build a modern station when he is clueless about what he is doing…..Funny how I can run conduit, pull wire, tie in motor controls and disconnect switches and everything else in a commercial building and not think twice, but tell me to set up a ham station and I'm lost.

Tom

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On Behalf Of sigcom1
Sent: Friday, May 04, 2007 4:03 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: Need more time

Well, the FCC-1 & 2 are a good start to your RF test equipment collection. You'll end up with a freq. counter and a signal generator. From there you could build a simple direct-conversion mixer followed by a simple audio amplifier. That, pumped by the FCC-2, would give you a basic general coverage receiver (if you don't already have one) for monitoring transmitters, WWV, etc.. An RF amplifier and preselector could easily be added later.

Do you currently have a way of listening to WWV? That is all you need to calibrate the FCC-1. You can probably get it within a couple of Hz just by using the beat note. \

FWIW, I would recommend housing the FCC-1 and 2 together as a stand-alone instrument instead of building them into the MMR. More flexible that way. But that's me :-).

73.......Steve Smith WB6TNL

--- In HYPERLINK
"mailto:mmr40owngrp%40yahoogroups.com"mmr40owngrp@-yahoogroups.-com, "Thomas
Butchers" <kf4yyd@...>
wrote:
>
> Not to mention I need more test equipment. I received my DDS chip
from
> Analog Devices for my FCC-2 the other day. I finally looked at the
thing and
> decided I wasn't going to even attempt it so it will be going out
to kit
> builders to put together. It seems like everything I build is
making its way
> out to California, something wrong there. I almost have the FCC-1
completed,
> it just needs the switches installed and the one IC that is soldered
> straight to the board; and then of course I need to figure out how
to align
> the damn thing. What I wouldn't do for the proper test equipment.
>
> I also have my HF packer amp waiting in the wings, since my wife
won't
> spring for an IC 746 Pro, or any other multi/band/mode radio I
thought it
> would be nice for the MMR to have some extra punch. The only thing
I'm not
> looking forward to there is the many torrids to wind (I'm the
backwards wind
> guy). And finally how to incorporate this stuff into the now
functioning
> MMR.........
>
> Tom kf4yyd

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.6.2/787 - Release Date: 5/3/2007 2:11
PM

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.6.2/787 - Release Date: 5/3/2007 2:11
PM

129. Re: Need more time

Yahoo group: mmr40owngrp
Date: 2007-05-05 04:48:11 UTC
From: sigcom1
Topic: 125 Message: 129

Hmmmmm......Funny, I don't know how to run conduit, pull wire, tie in motor controls, disconnect switches nor anything else in a commercial building. So there you go.

But I -can- plug stuff into a wall outlet and most of the time it doesn't smoke :-).

73.......Steve Smith WB6TNL
"Snort Rosin"

--- In mmr40owngrp@yahoogroups.com, "Thomas Butchers" <kf4yyd@...> wrote:
>
> Hey Steve,
> Funny
> how I can run conduit, pull wire, tie in motor controls and disconnect
> switches and everything else in a commercial building and not think twice,
> but tell me to set up a ham station and I'm lost.
>
>
>
> Tom

130. RE: [mmr40owngrp] Re: Need more time

Yahoo group: mmr40owngrp
Date: 2007-05-05 14:51:29 UTC
From: Thomas Butchers
Topic: 125 Message: 130

Ahhhh touché, one should not send emails when annoyed ..i had just read this reply about my not having a station from a gent off of qrp-l and should learn how to walk away.

Ah ..... dude ..... you don't want to hear this ..... but ..... someone is controlling YOU ..... think about it!

You work don't you ? If not , then that it is her right to tell you how to spend her money. Case closed!

Thanks for the reality check my friend

_____

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On Behalf Of sigcom1
Sent: Saturday, May 05, 2007 12:48 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: Need more time

Hmmmmm.....-Funny, I don't know how to run conduit, pull wire, tie in motor controls, disconnect switches nor anything else in a commercial building. So there you go.

But I -can- plug stuff into a wall outlet and most of the time it doesn't smoke :-).

73.....Steve Smith WB6TNL
"Snort Rosin"

--- In HYPERLINK "mailto:mmr40owngrp%40yahoogroups.com"mmr40owngrp@-yahoogroups.-com, "Thomas Butchers" <kf4yyd@...>
wrote:
>
> Hey Steve,
> Funny
> how I can run conduit, pull wire, tie in motor controls and disconnect
> switches and everything else in a commercial building and not think twice,
> but tell me to set up a ham station and I'm lost.
>
>
>
> Tom

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.6.4/790 - Release Date: 5/5/2007
10:34 AM

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.6.4/790 - Release Date: 5/5/2007
10:34 AM

131. RE: [mmr40owngrp] It Lives

Yahoo group: mmr40owngrp
Date: 2007-05-05 14:52:40 UTC
From: Thomas Butchers
Topic: 127 Message: 131

Ran,

Glad to hear you are up and running….. so how about a pic for the file then.

Tom kf4yyd

_____

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On Behalf Of Randal
Sent: Friday, May 04, 2007 6:21 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] It Lives

Wow the receiver is pretty darned good.

72,
Ran - W1IN

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.6.2/787 - Release Date: 5/3/2007 2:11 PM

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.6.4/790 - Release Date: 5/5/2007 10:34 AM

132. cool find

Yahoo group: mmr40owngrp
Date: 2007-05-06 16:53:26 UTC
From: Thomas Butchers
Topic: 132 Message: 132

Well I may not be completely helpless in the calibration department. I stumbled across my VX-5R and lo and behold was able to copy WWV with it on 15 MHz. Now here is my question, how do I use that to calibrate my FCC-1, which I understand is all I need. I haven't powered up the FCC-1 yet but if listen to WWV going tock, tock, tock "at the tone the time will be" and I can get it within a few hz than it can quit being a paper weight. I appreciate any information someone cares to throw my way.

Tom kf4yyd

"Beer is proof that God loves us and wants us to be happy." -Ben Franklin

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.6.5/791 - Release Date: 5/6/2007 9:07 AM

133. Re: [mmr40owngrp] L2 Clarification- Oscillator is oscillating

Yahoo group: mmr40owngrp
Date: 2007-05-04 01:52:03 UTC
From: Chris Waldrup
Topic: 121 Message: 133

I tried a few turns off one at a time on both L1 and L2. I ended up
rewinding L1.
I settled on 39 turns on L1 and taking 2 turns off L2.
My frequency coverage was 2.984-2.836 Mhz on one switch setting, and
2.714-2.856 Mhz on the other switch setting.
So I have a total range of 7.016-7.286 Mhz. I tried taking one turn off L1
and it put me a little below 7 Mhz. I would like to have coverage to 7 but
it might be good to have a little guard around the band edges.

Chris
----- Original Message -----
From: "Rob May" <roblitespeed@...>
To: <mmr40owngrp@yahoogroups.com>
Sent: Wednesday, May 02, 2007 10:32 PM
Subject: RE: [mmr40owngrp] L2 Clarification- Oscillator is oscillating

> Those are good numbers Chris. You might want to play with the windings on
> L2 to get the frequency a little closer to 3 MHz. Remember the operating
> frequency is BFO - LO, so 10.000 - 2.953 = 7.047 MHz, just above the QRP
> CW
> calling frequency. If worse comes to worse, you could take a turn of of
> L1.
> Rob
> NV5E
>
>
>>From: "Chris Waldrup" <kd4pbj@...>
>>Reply-To: mmr40owngrp@yahoogroups.com
>>To: <mmr40owngrp@yahoogroups.com>
>>Subject: [mmr40owngrp] L2 Clarification- Oscillator is oscillating
>>Date: Wed, 2 May 2007 21:25:32 -0400
>>
>>I got the oscillator portion (only) of the PCB assembled. I did insert
>>the
>>78L05 and associated capacitors, power connector and Shottky diode.
>>I soldered a test point in the hole for U6, pin 6 (OSC input to the mixer)
>>and mounted the 22 pF cap to ground that is called for in the schematic.
>>But nothing more- I am going stepwise as I read about in one of the
>>earlier
>>posts. U6 has not been mounted yet.
>>
>> Here are my measurements with my scope and counter:
>>
>>Brass Screw fully out 2.8134Mhz, 1.4V p-p
>>Brass Screw fully in 2.953 Mhz, 1 V p-p

>>
>>other switch setting (CW-SSB Switch):
>>
>>Brass Screw fully out 2.693 Mhz, 1.3V p-p
>>Brass Screw fully in 2.820 Mhz, 1 V p-p
>>
>>I wound L2 exactly as described, but did have to cross one of the feedback
>>wires (the one facing the outside of the board) with one of the primary
>>windings. It still worked.
>>
>>Is this consistent with what others are getting? Thanks for the feedback,
>>you guys are great!
>>
>>Chris
>>KD4PBJ
>>Raleigh, NC
>>
>>
>> ----- Original Message -----
>> From: sigcom1
>> To: mmr40owngrp@yahoogroups.com
>> Sent: Tuesday, May 01, 2007 11:22 PM
>> Subject: [mmr40owngrp] Re: L2 Clarification
>>
>>
>> Chris,
>>
>> If the coil is wound correctly, the leads basically fall into place.
>>
>> If the windings are on the toroid 'backwards', the only way the coil
>> will fit with the leads straight down is with the toroid cross-wise to
>> the pattern on the board. It -should- still work OK but don't take my
>> word for it because the last thing I did to Tom's radio was to re-wind
>> the coil so that the toroid was lined up with the pattern on the
>> board. Before that the PTO wouldn't oscillate even though I checked
>> the leads and the windings six ways from Sunday. What a fight that
>> was. I even had another set of eyes check it out and he agreed that
>> it should work, but it woulnd't.
>>
>> Best of luck with your kit. Keep us posted on your progress.
>>
>> 73.......Steve Smith WB6TNL
>> "Snort Rosin"
>>
>> --- In mmr40owngrp@yahoogroups.com, "kd4pbj" <kd4pbj@...> wrote:
>> >
>> > Hi Guys,
>> >
>> > I wound L2 as specified in the instructions. I wound the 28 turns,
>> > made a tap, and wound 5 more. I am a little unclear about which

>> > feedback (tap) wire solders to where. I see two pads marked F on
>> the
>> > board, and I want to get the phasing right. Could someone please
>> > clarify the instructions as to which wire of L2 solders to which
>> pad.
>> > Thanks.
>> >
>> > Chris
>> > KD4PBJ
>> >
>>
>>
>>
>>
>
> ~~~~~~
> Watch free concerts with Pink, Rod Stewart, Oasis and more. Visit MSN In
> Concert today. http://music.msn.com/presents?icid=ncmsnpresentstagline
>
>
>
>
> Yahoo! Groups Links
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>
>

134. Re: [mmr40owngrp] L2 Clarification- Oscillator is oscillating

Yahoo group: mmr40owngrp
Date: 2007-05-06 23:55:57 UTC
From: Rob May
Topic: 121 Message: 134

Chris, you are close enough that you can probably there just by adjusting
the spacing on the windings of L2.
Rob
NV5E

>From: "Chris Waldrup" <kd4pbj@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: <mmr40owngrp@yahoogroups.com>
>Subject: Re: [mmr40owngrp] L2 Clarification- Oscillator is oscillating
>Date: Thu, 3 May 2007 21:52:03 -0400
>
>I tried a few turns off one at a time on both L1 and L2. I ended up
>rewinding L1.
>I settled on 39 turns on L1 and taking 2 turns off L2.
>My frequency coverage was 2.984-2.836 Mhz on one switch setting, and
>2.714-2.856 Mhz on the other switch setting.
>So I have a total range of 7.016-7.286 Mhz. I tried taking one turn off L1
>and it put me a little below 7 Mhz. I would like to have coverage to 7 but
>it might be good to have a little guard around the band edges.
>
>Chris

Download Messenger. Join the i?m Initiative. Help make a difference today.
http://im.live.com/messenger/im/home/?source=TAGHM_APR07

135. another one built

Yahoo group: mmr40owngrp
Date: 2007-05-07 02:11:33 UTC
From: kd4pbj
Topic: 135 Message: 135

I got my board finally built and tuned up today. I haven't drilled or prepared the enclosure yet, but this is on my To Do list for this week. I am getting around 5.7 watts output as measured with my scope in the center of the band at 13.8 V supply voltage. I found a QSO this morning in progress and the audio sounded very nice and clean.
I have posted a picture of the completed board in the files section under KD4PBJ. I will update the pictures as I get more done.
The offer of electret mic elements is still open to anyone who didn't get some on the first round or if you got some and would like more. Just let me know if you need any.

Chris
KD4PBJ
Raleigh, NC

136. Re: [mmr40owngrp] another one built

Yahoo group: mmr40owngrp
Date: 2007-05-07 13:22:35 UTC
From: Lee Mairs (SAG)
Topic: 135 Message: 136

Chris -
I misplaced the original post about the mike elements. I would
definitely like at least one.
73 de Lee
KM4YY/8
Romney, WV

kd4pbj wrote:
>
> I got my board finally built and tuned up today. I haven't drilled or
> prepared the enclosure yet, but this is on my To Do list for this week.
> I am getting around 5.7 watts output as measured with my scope in the
> center of the band at 13.8 V supply voltage. I found a QSO this morning
> in progress and the audio sounded very nice and clean.
> I have posted a picture of the completed board in the files section
> under KD4PBJ. I will update the pictures as I get more done.
> The offer of electret mic elements is still open to anyone who didn't
> get some on the first round or if you got some and would like more.
> Just let me know if you need any.
>
> Chris
> KD4PBJ
> Raleigh, NC
>
>

137. mmr with ssb

Yahoo group: mmr40owngrp
Date: 2007-05-07 16:54:49 UTC
From: bright235spark
Topic: 137 Message: 137

Hi,

I enjoy reading the trials & tribulations of building this kit. The results look really good. Thanks for posting the photos, that really helps. I am going to remember all the good advice about coil winding, when it comes to my turn to build the kit.

Has anyone information about the performance in the ssb mode and the distances possible with this rig ? I have no experience with ssb, only morse and psk, so any reports would be welcome.

Regards

John F5VLM

138. Power supplies

Yahoo group: mmr40owngrp
Date: 2007-05-07 23:06:11 UTC
From: Thomas Butchers
Topic: 138 Message: 138

What is the general consensus on building a qrp power supply? I figure I need a 10- 12 amp power supply to handle the MMR and the HF packer amp (rig needs 2 and the amp needs 6). Plus that way I would have a little extra left over for whatever.

But does it pay to roll your own? I wouldn't mind an Astron 35A but I'm not going to drop a $150 dollars for one; and I don't know how cost effective building one is. I know a lot people use batteries but I'm looking to just plug and play not recharge.

The handbook has a 40 amp switching power supply but that one probably costs more than just buying the Astron. Anybody know where I can locate some plans to build one that won't cost an arm and a leg or even a low cost prebuilt unit that will do the trick?

Tom kf4yyd

"Beer is proof that God loves us and wants us to be happy." -Ben Franklin

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.6.5/792 - Release Date: 5/6/2007 9:01 PM

139. Re: [mmr40owngrp] Power supplies

Yahoo group: mmr40owngrp
Date: 2007-05-08 01:28:46 UTC
From: wlinn@stmarieswireless.com
Topic: 138 Message: 139

Unless you already have a transformer large enough to provide the current, you'd probably be ahead to shop around for something already built. (You aren't really talking QRP at these currents..) However, over the years, I've been fortunate to find some pretty good used supplies at hamfests. That might be a good bet. Also, I think you'll discover in your power supply quest why some of the guys use those batteries! :) And... on the flip side, building a solid, well filtered power supply is a satisfying experience.. so, go for it, if you can find a hefty transformer and other parts reasonably priced..

Good Luck..

Bill - W7WEL

> What is the general consensus on building a qrp power supply? I figure I
> need a 10- 12 amp power supply to handle the MMR and the HF packer amp
> (rig
> needs 2 and the amp needs 6). Plus that way I would have a little extra
> left
> over for whatever.
>
> But does it pay to roll your own? I wouldn't mind an Astron 35A but I'm
> not
> going to drop a $150 dollars for one; and I don't know how cost effective
> building one is. I know a lot people use batteries but I'm looking to just
> plug and play not recharge.
>
> The handbook has a 40 amp switching power supply but that one probably
> costs
> more than just buying the Astron. Anybody know where I can locate some
> plans
> to build one that won't cost an arm and a leg or even a low cost prebuilt
> unit that will do the trick?
>
> Tom kf4yyd
>
> "Beer is proof that God loves us and wants us to be happy." -Ben Franklin
>
> No virus found in this outgoing message.
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> 9:01
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140. Re: mmr with ssb

Yahoo group: mmr40owngrp
Date: 2007-05-08 11:02:13 UTC
From: Tim O'Rourke
Topic: 137 Message: 140

I have never played much on 40 SSB except for DX. I have been amazed at tthe contacts I have had. Both coasts, AV,UT, all the NE and Mid west. The week I spent the most time with it was great with low noise and the BC staions IE long skip did not come in until almost 16Z. I used a cheap surplus cell phone mic and had great reports. I have used it backpacking with an inverted v and from home with a rotatable dipole. I plan on using a rf processor at some point but right now it is back burner. Try it and I believe you will be suprised at how much fun you can have.
Tim W4YN
--- In mmr40owngrp@yahoogroups.com, "bright235spark" <davisjo@...> wrote:
>
> Hi,
>
> I enjoy reading the trials & tribulations of building this kit. The
> results look really good. Thanks for posting the photos, that really
> helps. I am going to remember all the good advice
> about coil winding, when it comes to my turn to build the kit.
>
> Has anyone information about the performance in the ssb mode and the
> distances possible with this rig ? I have no experience with ssb,
> only morse and psk, so any reports would be welcome.
>
> Regards
>
> John F5VLM
>

141. Re: another one built

Yahoo group: mmr40owngrp
Date: 2007-05-08 11:05:17 UTC
From: Tim O'Rourke
Topic: 135 Message: 141

Lee
I believe I have an extra AT&T cell mic I used. It is in a small
enclosure and has PPT switch. You will have to rewire the switch and
add proper plug. Send me ur address and I send one to you. We are
close eneough for a QSO when you are finished.
Tim W4YN
--- In mmr40owngrp@yahoogroups.com, "Lee Mairs (SAG)" <lmairs@...>
wrote:
>
> Chris -
> I misplaced the original post about the mike elements. I would
> definitely like at least one.
> 73 de Lee
> KM4YY/8
> Romney, WV
>
>
> kd4pbj wrote:
> >
> > I got my board finally built and tuned up today. I haven't
drilled or
> > prepared the enclosure yet, but this is on my To Do list for this
week.
> > I am getting around 5.7 watts output as measured with my scope in
the
> > center of the band at 13.8 V supply voltage. I found a QSO this
morning
> > in progress and the audio sounded very nice and clean.
> > I have posted a picture of the completed board in the files
section
> > under KD4PBJ. I will update the pictures as I get more done.
> > The offer of electret mic elements is still open to anyone who
didn't
> > get some on the first round or if you got some and would like
more.
> > Just let me know if you need any.
> >
> > Chris
> > KD4PBJ
> > Raleigh, NC
> >
> >
>

142. Re: Power supplies

Yahoo group: mmr40owngrp
Date: 2007-05-08 11:08:30 UTC
From: Tim O'Rourke
Topic: 138 Message: 142

You may want to just use a small gel cell if you are only looking for casual use. You can size it for the amp and not worry abt stout power supply. I have used the packer amp with a 7-10 amp hour gel cell and had good results. That being said check my posts on how well it does barefoot.
Tim
--- In mmr40owngrp@yahoogroups.com, "Thomas Butchers" <kf4yyd@...> wrote:
>
> What is the general consensus on building a qrp power supply? I figure I
> need a 10- 12 amp power supply to handle the MMR and the HF packer amp (rig
> needs 2 and the amp needs 6). Plus that way I would have a little extra left
> over for whatever.
>
> But does it pay to roll your own? I wouldn't mind an Astron 35A but I'm not
> going to drop a $150 dollars for one; and I don't know how cost effective
> building one is. I know a lot people use batteries but I'm looking to just
> plug and play not recharge.
>
> The handbook has a 40 amp switching power supply but that one probably costs
> more than just buying the Astron. Anybody know where I can locate some plans
> to build one that won't cost an arm and a leg or even a low cost prebuilt
> unit that will do the trick?
>
> Tom kf4yyd
>
> "Beer is proof that God loves us and wants us to be happy." -Ben Franklin
>
> No virus found in this outgoing message.
> Checked by AVG Free Edition.
> Version: 7.5.467 / Virus Database: 269.6.5/792 - Release Date: 5/6/2007 9:01
> PM
>

143. Re: mmr with ssb

Yahoo group: mmr40owngrp
Date: 2007-05-08 12:44:12 UTC
From: davisjo
Topic: 137 Message: 143

To Tim O'Rouke,

Many thanks for your post. The information was very helpful and certainly has encouraged me to try a kit.

Good luck to all the builders,

John F5VLM
----- Original Message -----
From: Tim O'Rourke
To: mmr40owngrp@yahoogroups.com
Sent: Tuesday, May 08, 2007 1:02 PM
Subject: [SPAM] [mmr40owngrp] Re: mmr with ssb

I have never played much on 40 SSB except for DX. I have been amazed at
tthe contacts I have had. Both coasts, AV,UT, all the NE and Mid west.
The week I spent the most time with it was great with low noise and the
BC staions IE long skip did not come in until almost 16Z. I used a
cheap surplus cell phone mic and had great reports. I have used it
backpacking with an inverted v and from home with a rotatable dipole.
I plan on using a rf processor at some point but right now it is back
burner. Try it and I believe you will be suprised at how much fun you
can have.
Tim W4YN
--- In mmr40owngrp@yahoogroups.com, "bright235spark" <davisjo@...>
wrote:
>
> Hi,
>
> I enjoy reading the trials & tribulations of building this kit. The
> results look really good. Thanks for posting the photos, that really
> helps. I am going to remember all the good advice
> about coil winding, when it comes to my turn to build the kit.
>
> Has anyone information about the performance in the ssb mode and the
> distances possible with this rig ? I have no experience with ssb,
> only morse and psk, so any reports would be welcome.
>
> Regards
>
> John F5VLM
>

Orange vous informe que cet e-mail a été contrôlé par l'anti-virus mail.
Aucun virus connu à ce jour par nos services n'a été détecté.

144. Re: [mmr40owngrp] Re: another one built

Yahoo group: mmr40owngrp
Date: 2007-05-08 14:04:32 UTC
From: Lee Mairs (SAG)
Topic: 135 Message: 144

Hi Tim -
THat would be wonderful. My address is:
Lee Mairs
POB 1820
Romney, WV 26757

I was thinking about cleaning off the bench today and getting started.
This email provides the final decision making push to do so!

73 de Lee
KM4YY/8

Tim O'Rourke wrote:
>
> Lee
> I believe I have an extra AT&T cell mic I used. It is in a small
> enclosure and has PPT switch. You will have to rewire the switch and
> add proper plug. Send me ur address and I send one to you. We are
> close eneough for a QSO when you are finished.
> Tim W4YN
> --- In mmr40owngrp@yahoogroups.com
> <mailto:mmr40owngrp%40yahoogroups.com>, "Lee Mairs (SAG)" <lmairs@...>
> wrote:
> >
> > Chris -
> > I misplaced the original post about the mike elements. I would
> > definitely like at least one.
> > 73 de Lee
> > KM4YY/8
> > Romney, WV
> >
> >
> > kd4pbj wrote:
> > >
> > > I got my board finally built and tuned up today. I haven't
> drilled or
> > > prepared the enclosure yet, but this is on my To Do list for this
> week.
> > > I am getting around 5.7 watts output as measured with my scope in
> the
> > > center of the band at 13.8 V supply voltage. I found a QSO this
> morning
> > > in progress and the audio sounded very nice and clean.
> > > I have posted a picture of the completed board in the files
> section
> > > under KD4PBJ. I will update the pictures as I get more done.

> > > The offer of electret mic elements is still open to anyone who
> didn't
> > > get some on the first round or if you got some and would like
> more.
> > > Just let me know if you need any.
> > >
> > > Chris
> > > KD4PBJ
> > > Raleigh, NC
> > >
> > >
> >
>
>

145. On the air and photos posted

Yahoo group: mmr40owngrp
Date: 2007-05-08 14:30:41 UTC
From: Randal
Topic: 145 Message: 145

Spent the week-end using my MMR40 on CW. Had so much fun didn't bother to cobble up a microphone until yesterday. Last night made a few SSB contacts with great audio reports. Most stations couldn't believe that it wasn't a commercial rig.

Output is 6.88 watts

Low extremes are a git higher than I'd like (7.0314 CW and 7.1642 phone) but I think I'll leave it alone for a while. I can always take a turn or two off later. I am taking it with me on a trip to give it some "on air from the field time".

May integrate my FCC-2 at some point but not knowing what frequency I'm on doesn't seem to be a bother.

72,
Ran - W1IN

146. Re: On the air and photos posted

Yahoo group: mmr40owngrp
Date: 2007-05-08 20:07:04 UTC
From: KF4YYD
Topic: 145 Message: 146

Ran,

The rig looks good! I like the way tou cut your speaker grill, it kind of sets it apart. BTW what type of microphone housing did you use?

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "Randal" <w1in@...> wrote:
>
> Spent the week-end using my MMR40 on CW. Had so much fun didn't bother
> to cobble up a microphone until yesterday. Last night made a few SSB
> contacts with great audio reports. Most stations couldn't believe that
> it wasn't a commercial rig.
>
> Output is 6.88 watts
>
> Low extremes are a git higher than I'd like (7.0314 CW and 7.1642
> phone) but I think I'll leave it alone for a while. I can always take
> a turn or two off later. I am taking it with me on a trip to give it
> some "on air from the field time".
>
> May integrate my FCC-2 at some point but not knowing what frequency
> I'm on doesn't seem to be a bother.
>
> 72,
> Ran - W1IN
>

147. Re: On the air and photos posted

Yahoo group: mmr40owngrp
Date: 2007-05-08 21:08:14 UTC
From: Randal
Topic: 145 Message: 147

Thanks Tom,
I milled the speaker grill in a Bridgeport. Owning a company with lots of machining toys is a plus.

The mic is an old Alinco housing from my junk box the electret element is from a Kenwood. I left the speaker in just for the weight, without it I kept loosing the mic in my hand.

72,
Ran - W1IN

--- In mmr40owngrp@yahoogroups.com, "KF4YYD" <kf4yyd@...> wrote:
>
> Ran,
>
> The rig looks good! I like the way tou cut your speaker grill, it
> kind of sets it apart. BTW what type of microphone housing did you
> use?
>
> Tom kf4yyd
>

148. unpacked kit mmr40 1st. series for sale...

Yahoo group: mmr40owngrp
Date: 2007-05-10 01:28:00 UTC
From: Mike Witham
Topic: 148 Message: 148
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

149. Finally got started on the kit

Yahoo group: mmr40owngrp
Date: 2007-05-11 04:33:18 UTC
From: Garry
Topic: 149 Message: 149

Yes. I am finally on my way with the MMR-40 kit. Took the advice given on here and built up the vfo and tested it out. Got the frequency bang on with minimal fiddling. My vfo output was not as high as Kd4pbj got on his. I was looking at just over .5 volts p-p signal as measured on my old scope. The sine wave was perfectly clean though.

Is that going to be a strong enough signal to the mixer, anyone know?

Well I guess I'll find out in the next few days.

Garry/Ve7ajj

150. Frequency Change to European Band Plan

Yahoo group: mmr40owngrp
Date: 2007-05-11 21:40:55 UTC
From: hb9tso
Topic: 150 Message: 150

Hello dear Group Members
Is it a big thing to adjust the RIG without a decrease in performance
to european bandplan: 7.ooo Mhz 7.045 for CW and from 7.045Mhz to 7.1Mhz

Nice regards de Rolf

151. Re: Finally got started on the kit

Yahoo group: mmr40owngrp
Date: 2007-05-12 00:35:33 UTC
From: KF4YYD
Topic: 149 Message: 151

Sounds good Gary, guess you didn't have any of the problems a couple
of us had getting ours to oscillate.

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "Garry" <bcgas@...> wrote:
>
> Yes. I am finally on my way with the MMR-40 kit. Took the advice
> given on here and built up the vfo and tested it out. Got the
> frequency bang on with minimal fiddling. My vfo output was not as
> high as Kd4pbj got on his. I was looking at just over .5 volts p-p
> signal as measured on my old scope. The sine wave was perfectly
clean
> though.
>
> Is that going to be a strong enough signal to the mixer, anyone
know?
>
> Well I guess I'll find out in the next few days.
>
> Garry/Ve7ajj
>

152. Re: Frequency Change to European Band Plan

Yahoo group: mmr40owngrp
Date: 2007-05-12 00:41:15 UTC
From: KF4YYD
Topic: 150 Message: 152

Rolf,

Well I'm no expert and maybe I shouldn't say anything on this subject
but I wouldn't think it would be to hard to move the frequency up
where you want it. It seems that several of us had to play with the
turns on L1 / L2 to get them into our bandplan so adding a turn or
two (or subtracting not sure which) shouldn't be that big of a deal.

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "hb9tso" <r.t.eberhard@...> wrote:
>
> Hello dear Group Members
> Is it a big thing to adjust the RIG without a decrease in
performance
> to european bandplan: 7.ooo Mhz 7.045 for CW and from 7.045Mhz to
7.1Mhz
>
> Nice regards de Rolf
>

153. Re: [mmr40owngrp] Re: Frequency Change to European Band Plan

Yahoo group: mmr40owngrp
Date: 2007-05-12 01:08:59 UTC
From: wlinn@stmarieswireless.com
Topic: 150 Message: 153

Hi Rolf, No problem getting into the range you need, in fact, I wound L1 tight and crowded the holes so I'm sure it was close (Plus or minus) to the 39 turns specified. Give or take a turn or two, it won't matter. Then I tweaked frequency by moving the spacing of the winding (Squeezing the turns together or spreading them apart will change the freq) on the toroid with my fingernail on L2 to get the frequency down to 7.00 mghz.

I suspect the problem of no oscillation is mostly caused by improper winding L2 and the feedback section. If it isn't wound in the right direction it will want to fit sideways to the diagram on the board which looks like it will cause the feedback coil (the five turns) to be out of its proper phase. I'd suggest that you do a little studying by placing the unwound toroid over the diagram on the board to help visualize how it will need to be wound so the ends will line up correctly with the holes on the board.

It is a great little kit. I built mine the week before going to Ozarkcon and have been operating portable for about 3 weeks now.

Good Luck
Bill - W7WEL

> Rolf,
>
> Well I'm no expert and maybe I shouldn't say anything on this subject
> but I wouldn't think it would be to hard to move the frequency up
> where you want it. It seems that several of us had to play with the
> turns on L1 / L2 to get them into our bandplan so adding a turn or
> two (or subtracting not sure which) shouldn't be that big of a deal.
>
> Tom kf4yyd
>
>
> --- In mmr40owngrp@yahoogroups.com, "hb9tso" <r.t.eberhard@...> wrote:
>>
>> Hello dear Group Members
>> Is it a big thing to adjust the RIG without a decrease in
> performance
>> to european bandplan: 7.ooo Mhz 7.045 for CW and from 7.045Mhz to
> 7.1Mhz
>>
>> Nice regards de Rolf
>>
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> Yahoo! Groups Links
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154. testing today and new microphone

Yahoo group: mmr40owngrp
Date: 2007-05-12 02:55:21 UTC
From: Chris Waldrup
Topic: 154 Message: 154

Hi Guys,

I took my MMR-40 to work today (where the equipment gets calibrated by Agilent annually and I can trust the measurements!) and did some testing during lunch.
I tested the output with a spectrum analyzer and I got an output of 39 dBm (almost 8 watts) after fiddling with the turns spacing on the two filter inductors. It was good to see a graphical representation of the power and to be able to tweak and see the power go up or down.

The worst harmonics were around 56 dBc and interestingly were a little higher in SSB mode than they were in CW mode. Either way, they met FCC rules.

The weakest signal I could detect (used a 1 khz tone modulation on the signal generator) was between -128 and -130 dBm. I had to listen hard with the speaker up to my ear to hear it at -130 dBm but as I turned the RF on and off I could detect the signal dropping out. I suspect that the atmospheric noise at 40 meters would prevent me from hearing a -130 dBm signal though.

One of our RF designers was standing behind me watching me doing the testing and said that the results looked great. He is so used to cellular and microwave RF that he was intrigued with a 7 Mhz circuit.

I built a microphone tonight using one of those electret elements that I am sending out to people and it works well. I hope to get on the air tomorrow and ask for signal reports, and will post a picture of the microphone tomorrow afternoon or evening. An easy build using common items and it looks good too!

Chris
KD4PBJ

----- Original Message -----
From: Garry
To: mmr40owngrp@yahoogroups.com
Sent: Friday, May 11, 2007 12:33 AM
Subject: [mmr40owngrp] Finally got started on the kit

Yes. I am finally on my way with the MMR-40 kit. Took the advice
given on here and built up the vfo and tested it out. Got the
frequency bang on with minimal fiddling. My vfo output was not as
high as Kd4pbj got on his. I was looking at just over .5 volts p-p
signal as measured on my old scope. The sine wave was perfectly clean
though.

Is that going to be a strong enough signal to the mixer, anyone know?

Well I guess I'll find out in the next few days.

Garry/Ve7ajj

155. Re: Frequency Change to European Band Plan

Yahoo group: mmr40owngrp
Date: 2007-05-12 03:58:55 UTC
From: sigcom1
Topic: 150 Message: 155

Rolf,

The PTO covers approximately 130 KHz so no adjustment would be necessary, simply use the "CW" segment for both CW and SSB in your region. That is unless you wish to bandspread the PTO coverage in which case you could reduce the number of windings (and spread them out to fill the spacer) and increase the windings on the toroid. Or leave the toroid as per the instructions and increase the value of C8 (or pad it) to bring the PTO back into range.

73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "hb9tso" <r.t.eberhard@...> wrote:
>
> Hello dear Group Members
> Is it a big thing to adjust the RIG without a decrease in performance
> to european bandplan: 7.ooo Mhz 7.045 for CW and from 7.045Mhz to
7.1Mhz
>
> Nice regards de Rolf
>

156. Finished for now

Yahoo group: mmr40owngrp
Date: 2007-05-12 04:12:04 UTC
From: Don Hatlestad
Topic: 156 Message: 156

I finished my MMR-40 for now. My main interest was to build a more complicated rig than a RockMite for CW. This kit fit the bill perfectly. I'm fairly new to building so my tuning skills are a little weak. Every time I touch this rig, I learn something new about radios. Please check out more photos and thoughts about my experience with this rig and other QRP goodies at http://ac7fa.net.

Don, AC7FA
http://ac7fa.net

157. Little PTO

Yahoo group: mmr40owngrp
Date: 2007-05-12 04:51:30 UTC
From: sigcom1
Topic: 157 Message: 157

The PTO offers a ripe area for experimentation, both electrical and mechanical.

After I've finished Tom's radio and returned it to him, I plan upon breadboarding (Manhattan style) a PTO in order to play around with some ideas.

For instance, I'd like to stretch the segment range to 150 KHz in order to provide full (U.S.) 40 meter band coverage. This should be fairly simple to accomplish.

One thing I did implement on Tom's radio is a stop for the tuning screw. This is simply a 6-32 nut to which I applied thread locking compound after setting it at a spot on the tuning screw where it stops rotation as end of the tuning screw runs up against the end of the nylon screw. This prevents inadvertantly pushing the nylon screw out of the spacer if too much force is applied at the end of travel. Don't ask how I know about this :-P.

I'd also like to try a 40 TPI screw to reduce the tuning rate a bit. What I don't know is what effect the reduced screw diameter would have on the tuning range and frequency. Of course, a 4-40 screw would require different nuts and another way to bush the screw. The nuts would also need to be 5/16" like the existing 6-32 nuts in order to keep the spacer above the surface of the P.C. board.

This is just a mental excersize at the moment but here's an idea I thought would be good. As it is, the nylon screw provides the friction which prevents the tuning screw from moving once the operating frequency is set. The thing that bugs me is that the further the screw goes into the spacer the force required to turn it increases. Also unless the nylon screw is very tight, the spacer moves during tuning. This effect varies depending upon how the spacer and brass nuts are lined up and other factors. If there was a bushing at one of the brass nuts and the spacer was drilled out, except for the threads at the end needed for the nylon screw, it would provide more or less constant friction to the tuning screw and no force applied to the spacer. I thought about using an elastic stop nut but not sure if that would be reliable over a long period of time.

Anyway, there are other problems to overcome before I get to play with the PTO again.

73.......Steve Smith WB6TNL

158. Re: [mmr40owngrp] Re: Frequency Change to European Band Plan

Yahoo group: mmr40owngrp
Date: 2007-05-12 07:35:30 UTC
From: EBERHARD
Topic: 150 Message: 158

Thanke You very much for answering my question i wish you a very nice weekend!

Rolf / HB9TSO
----- Original Message -----
From: wlinn@stmarieswireless.com
To: mmr40owngrp@yahoogroups.com
Sent: Saturday, May 12, 2007 3:08 AM
Subject: Re: [mmr40owngrp] Re: Frequency Change to European Band Plan

Hi Rolf, No problem getting into the range you need, in fact, I wound L1 tight and crowded the holes so I'm sure it was close (Plus or minus) to the 39 turns specified. Give or take a turn or two, it won't matter. Then I tweaked frequency by moving the spacing of the winding (Squeezing the turns together or spreading them apart will change the freq) on the toroid with my fingernail on L2 to get the frequency down to 7.00 mghz.

I suspect the problem of no oscillation is mostly caused by improper winding L2 and the feedback section. If it isn't wound in the right direction it will want to fit sideways to the diagram on the board which looks like it will cause the feedback coil (the five turns) to be out of its proper phase. I'd suggest that you do a little studying by placing the unwound toroid over the diagram on the board to help visualize how it will need to be wound so the ends will line up correctly with the holes on the board.

It is a great little kit. I built mine the week before going to Ozarkcon and have been operating portable for about 3 weeks now.

Good Luck
Bill - W7WEL

> Rolf,
>
> Well I'm no expert and maybe I shouldn't say anything on this subject
> but I wouldn't think it would be to hard to move the frequency up
> where you want it. It seems that several of us had to play with the
> turns on L1 / L2 to get them into our bandplan so adding a turn or
> two (or subtracting not sure which) shouldn't be that big of a deal.
>
> Tom kf4yyd
>
>
> --- In mmr40owngrp@yahoogroups.com, "hb9tso" <r.t.eberhard@...> wrote:
>>
>> Hello dear Group Members
>> Is it a big thing to adjust the RIG without a decrease in

> performance
>> to european bandplan: 7.ooo Mhz 7.045 for CW and from 7.045Mhz to
> 7.1Mhz
>>
>> Nice regards de Rolf
>>
>
>
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>
> Yahoo! Groups Links
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159. Re: [mmr40owngrp] Re: Frequency Change to European Band Plan

Yahoo group: mmr40owngrp
Date: 2007-05-12 07:37:53 UTC
From: EBERHARD
Topic: 150 Message: 159

Dear Tom
I thanke you as well for the support, thanks!

Have very nice weekend,

de Rolf / HB9TSO
----- Original Message -----
From: KF4YYD
To: mmr40owngrp@yahoogroups.com
Sent: Saturday, May 12, 2007 2:41 AM
Subject: [mmr40owngrp] Re: Frequency Change to European Band Plan

Rolf,

Well I'm no expert and maybe I shouldn't say anything on this subject
but I wouldn't think it would be to hard to move the frequency up
where you want it. It seems that several of us had to play with the
turns on L1 / L2 to get them into our bandplan so adding a turn or
two (or subtracting not sure which) shouldn't be that big of a deal.

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "hb9tso" <r.t.eberhard@...> wrote:
>
> Hello dear Group Members
> Is it a big thing to adjust the RIG without a decrease in
performance
> to european bandplan: 7.ooo Mhz 7.045 for CW and from 7.045Mhz to
7.1Mhz
>
> Nice regards de Rolf
>

160. Re: [mmr40owngrp] Re: Frequency Change to European Band Plan

Yahoo group: mmr40owngrp
Date: 2007-05-12 07:36:20 UTC
From: EBERHARD
Topic: 150 Message: 160

I thanke you very much for your support, i wish you a very nice weekend!

Rolf / HB9TSO

----- Original Message -----
From: sigcom1
To: mmr40owngrp@yahoogroups.com
Sent: Saturday, May 12, 2007 5:58 AM
Subject: [mmr40owngrp] Re: Frequency Change to European Band Plan

Rolf,

The PTO covers approximately 130 KHz so no adjustment would be
necessary, simply use the "CW" segment for both CW and SSB in your
region. That is unless you wish to bandspread the PTO coverage in
which case you could reduce the number of windings (and spread them
out to fill the spacer) and increase the windings on the toroid. Or
leave the toroid as per the instructions and increase the value of C8
(or pad it) to bring the PTO back into range.

73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "hb9tso" <r.t.eberhard@...> wrote:
>
> Hello dear Group Members
> Is it a big thing to adjust the RIG without a decrease in performance
> to european bandplan: 7.ooo Mhz 7.045 for CW and from 7.045Mhz to
7.1Mhz
>
> Nice regards de Rolf
>

161. pictures of homemade mic posted and first SSB contact with the MMR40 this morning

Yahoo group: mmr40owngrp
Date: 2007-05-12 20:55:32 UTC
From: Chris Waldrup
Topic: 161 Message: 161

Lee,

No problem whatsoever. If you want more just let me know as I have more.

I have posted the pictures in the KD4PBJ section on the MMR40 yahoo page. The mic is made of a Radio Shack project box, pushbutton switch, drilled out rubber foot for mounting the mic element into and the coiled cord cut off an old cell phone charger and fitted with a 1/8 inch stereo plug. I should have probably used a little smaller project box as the one I used was about 3/4 inch too long, but it is the smallest plastic one I had in my enclosure stash. I removed the rubber boot from the mic element, and drilled the rubber foot to fit the element. A small hole was drilled into the project box cover and the rubber foot was glued on the inside of the box with some superglue, centered on the hole. This holds the element snugly and the element can be replaced if necessary.

I had my first SSB contact with this rig this morning with K4CCO in Carrollton GA which is about 450 miles away from me in Raleigh. He said that the audio sounded great and that he couldn't tell that it was a homemade microphone. We had a 20 minute QSO with no problems until the QRM started from an adjacent station.

Chris
KD4PBJ

----- Original Message -----
From: "Lee Mairs (SAG)" <lmairs@...>
To: "Chris Waldrup" <kd4pbj@...>
Sent: Friday, May 11, 2007 11:07 PM
Subject: Thanks

> Chris -
> Thanks for the microphone elements that you sent me. They arrived today.
>
> That was an excellent post today about your MMR-40. I look forward to
> seeing the pictures and description of the microphone that you built for
> this radio.
> 73 de Lee
> KM4YY/8
>

162. Re: Finally got started on the kit

Yahoo group: mmr40owngrp
Date: 2007-05-13 05:07:41 UTC
From: Garry
Topic: 149 Message: 162

Tom. I was able to take advantage of the dialog that you people posted to assist me in my build. Like many others I could not get the number of windings on the form however I have some very small drill bits so drilled another hole to allow for the necessary two windings that I could not squeeze onto the form as it came in the kit.

I do owe you folks a vote of thanks for passing along all the information that you did. Hopefully I will find the time over the next week to complete the rig. There has just been too many things happenng in my days lately.

73

Garry

In mmr40owngrp@yahoogroups.com, "KF4YYD" <kf4yyd@...> wrote:
>p
> Sounds good Gary, guess you didn't have any of the problems a couple
> of us had getting ours to oscillate.
>
> Tom kf4yyd
>

163. Another MMR-40 tunes up.

Yahoo group: mmr40owngrp
Date: 2007-05-13 18:05:40 UTC
From: Walter Lawhead Sr
Topic: 163 Message: 163

Rig went together with no problems other than ones of my own making. Read instructions, don't anticipate. Was able to easily wind pto coil and still had room for several more turns. I straightened the 32ga wire carefully before starting to wind, then wound 5 turns at a time and compressed the turns before adding another 5. When first powering xmtr with final installed I could only get 3 watts out, carefully tweaking L3 brought output up to 6.3 watts. This took close to an hour of moving mostly L3, but L4 did bring output up a little. Receiver works very well. Must still build mic and adjust frequency range. As initially built covers aprox 6.98~7.25Mhz. Neat project and fun to build.

164. Re: Finally got started on the kit

Yahoo group: mmr40owngrp
Date: 2007-05-13 22:36:29 UTC
From: KF4YYD
Topic: 149 Message: 164

Glad to know the group was helpful on the build Garry. BTW I know
what you mean about too much to do and not enough time to do it in.

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "Garry" <bcgas@...> wrote:
>
> Tom. I was able to take advantage of the dialog that you people
> posted to assist me in my build. Like many others I could not get
the
> number of windings on the form however I have some very small drill
> bits so drilled another hole to allow for the necessary two
windings
> that I could not squeeze onto the form as it came in the kit.
>
> I do owe you folks a vote of thanks for passing along all the
> information that you did. Hopefully I will find the time over the
> next week to complete the rig. There has just been too many things
> happenng in my days lately.
>
> 73
>
> Garry

165. Re: Another MMR-40 tunes up.

Yahoo group: mmr40owngrp
Date: 2007-05-13 22:38:25 UTC
From: KF4YYD
Topic: 163 Message: 165

Sounds good Walter, now we just need to have a picture of your
finished project for the photo's file.

Tom kf4yyd

--- In mmr40owngrp@...m, "Walter Lawhead Sr" <ke8bq@...>
wrote:
>
> Rig went together with no problems other than ones of my own making.
> Read instructions, don't anticipate. Was able to easily wind pto
coil
> and still had room for several more turns. I straightened the 32ga
> wire carefully before starting to wind, then wound 5 turns at a time
> and compressed the turns before adding another 5. When first
powering
> xmtr with final installed I could only get 3 watts out, carefully
> tweaking L3 brought output up to 6.3 watts. This took close to an
> hour of moving mostly L3, but L4 did bring output up a little.
> Receiver works very well. Must still build mic and adjust frequency
> range. As initially built covers aprox 6.98~7.25Mhz. Neat project
and
> fun to build.
>

166. Re: pictures of homemade mic posted and first SSB contact with the MMR40 this morning

Yahoo group: mmr40owngrp
Date: 2007-05-13 22:42:42 UTC
From: KF4YYD
Topic: 161 Message: 166

Chris,

Like your microphone! 450 miles on the first SSB QSO is pretty impressive too. Thanks for sharing the photos I need to start thinking about getting something made up along with everything eles I have in line to do. An antenna should probably be at the top of my list....

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "Chris Waldrup" <kd4pbj@...> wrote:
>
> Lee,
>
> No problem whatsoever. If you want more just let me know as I have more.
>
> I have posted the pictures in the KD4PBJ section on the MMR40 yahoo page.
> The mic is made of a Radio Shack project box, pushbutton switch, drilled out
> rubber foot for mounting the mic element into and the coiled cord cut off an
> old cell phone charger and fitted with a 1/8 inch stereo plug. I should
> have probably used a little smaller project box as the one I used was about
> 3/4 inch too long, but it is the smallest plastic one I had in my enclosure
> stash. I removed the rubber boot from the mic element, and drilled the
> rubber foot to fit the element. A small hole was drilled into the project
> box cover and the rubber foot was glued on the inside of the box with some
> superglue, centered on the hole. This holds the element snugly and the
> element can be replaced if necessary.
>
> I had my first SSB contact with this rig this morning with K4CCO in
> Carrollton GA which is about 450 miles away from me in Raleigh. He said

> that the audio sounded great and that he couldn't tell that it was
a
> homemade microphone. We had a 20 minute QSO with no problems until
the QRM
> started from an adjacent station.
>
> Chris
> KD4PBJ

167. Beginning the build.....

Yahoo group: mmr40owngrp
Date: 2007-05-14 02:00:02 UTC
From: kd4kld
Topic: 167 Message: 167

After 6 weeks of shelving my MMR40 kit, I've taken the plunge and began construction! I had anticipated assembly shortly after the kit arrived but employment changes led to delay & I'm glad for the wait! Many here have already pre-troubleshooted what would have been a frustrating experience for me! I had even advertized the kit for sale but I'm determined to have it on the air by August! (I coach a youth football team) Anyway, I have completed the PTO coil with the proper 39 turns and have soldered the nuts properly! The mowed the lawn & watched a poor baseball game! In any event, I've begun!! As I lack an O-scope and many of the diagnostic tools, I plan on learning from everyones mistakes and setbacks. Look forward to my 1st. QSO!

Mike/KD4KLD

168. another mmr-40 started

Yahoo group: mmr40owngrp
Date: 2007-05-14 03:13:27 UTC
From: frank_humpal
Topic: 168 Message: 168

Hi
Got to the point of the Honey-do list that I could start on my kit this weekend. Got the L1 coil wound and soldered in place, diodes in and one quadrant of resisters in. Boy the parts are a lot smaller then the ones in the HW-8 I built years ago and/or my eye's aren't what they were. Glad I have a low power binocular microscope I got as a kid. Was even able to count the windings on L1. The saga will continual as time permits.
73
Frank KA9FZR

169. First MMR-40 Contact

Yahoo group: mmr40owngrp
Date: 2007-05-17 04:54:56 UTC
From: Don Hatlestad
Topic: 169 Message: 169

Woo Hoo! I made my first ever QRP, homebrew, built-it-myself contact tonight with my MMR-40 rig and ground plane vertical (SteppIR).

Don, AC7FA
http://ac7fa.net

170. Whoo-who

Yahoo group: mmr40owngrp
Date: 2007-05-17 05:03:00 UTC
From: Garry
Topic: 170 Message: 170

Yep. Got the receiver working just fine. Not had a chance to tune up the transmitter though, only so much time in a day. Maybe if I hadn't spent so much time tuning the band and listening to the signals, both CW and SSB. Tomorrow I get the final installed and give it the smoke test.

Somebody mentioned that the receiver is nice and quiet and that seems to be the case. Not quite as sensitive as my Kenwood however not bad at all and let's face it, who ever trys to work a station that he can just barely discern from the noise?

I'd feel better if I had a way of setting T1 for max receive other than by ear though it probably wouldn't make any practical difference.

I also don't think I'm going to use the provided case. I already have a prepared computer power supply box that has greater height and will allow me to add various mods such as a Pico keyer and possibly a sharper active filter as well as a larger speaker. I'm thinking too that I might build an outboard vfo. As it is the rig will not quite tune to the qrp phone frequency. (I don't think) All in good time of course. hi

171. Re: First MMR-40 Contact

Yahoo group: mmr40owngrp
Date: 2007-05-17 05:18:52 UTC
From: Garry
Topic: 169 Message: 171

Congratulations Don.. I'm hoping I won't be too far behind you. I know it feels good. I had a similar experience just a few months back when I built a Small Wonder labs qrp cw tranceiver (SW40+) This rig should put out better than twice the power of that one. Hoping to use it in the field for field day. Just waiting for the tuner I ordered from Doug to match an end fed half wave and then should be good to go.

Maybe we get to work MMR-40 to MMR-40 sometime down the road. Was that contact CW or SSB?

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "Don Hatlestad" <don.ac7fa@...> wrote:
>
> Woo Hoo! I made my first ever QRP, homebrew, built-it-myself contact
> tonight with my MMR-40 rig and ground plane vertical (SteppIR).
>
> Don, AC7FA
> http://ac7fa.net
>

172. Re: [mmr40owngrp] Re: First MMR-40 Contact

Yahoo group: mmr40owngrp
Date: 2007-05-17 13:04:54 UTC
From: Lee Mairs (SAG)
Topic: 169 Message: 172

Finally got started on my MMR 40 and wasted the entire afternoon messing with L1. I wound the coil twice getting at most 27 turns on it, I finally tried to re-drill the spacer, but that didn't do much other than mess up the spacer. Alas, I then noticed the "other" hank of magnet wire provided - the really thin #32 stuff...

Thirty-nine turns fitted as specified once I used the correct wire, but then noticed that the mini slide switch would not fit into its location directly behind the third brass nut once the cool was mounted with the 1/4 inch nylon screw. I re-positioned the nuts so that the inboard nut was as far forward as possible, and then re-soldered all. I still had to grind some of the material off the nylon nut to let the miniature slide switch seat correctly.

Oh well. I used to be a lot faster in the daze of my youth. One part installed after 8 hours isn't something to be proud of, but I am having fun!!

73 de Lee
KM4YY/8

173. RE: [mmr40owngrp] Re: First MMR-40 Contact

Yahoo group: mmr40owngrp
Date: 2007-05-17 13:07:09 UTC
From: Alverson, Tom (Xetron)
Topic: 169 Message: 173

The switch goes on the other side of the board.

73 de Tom NU8D

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]
On Behalf Of Lee Mairs (SAG)
Sent: Thursday, May 17, 2007 9:05 AM
To: mmr40owngrp@yahoogroups.com
Subject: Re: [mmr40owngrp] Re: First MMR-40 Contact

Finally got started on my MMR 40 and wasted the entire afternoon messing

with L1. I wound the coil twice getting at most 27 turns on it, I
finally tried to re-drill the spacer, but that didn't do much other than

mess up the spacer. Alas, I then noticed the "other" hank of magnet
wire provided - the really thin #32 stuff...

Thirty-nine turns fitted as specified once I used the correct wire, but
then noticed that the mini slide switch would not fit into its location
directly behind the third brass nut once the cool was mounted with the
1/4 inch nylon screw. I re-positioned the nuts so that the inboard nut
was as far forward as possible, and then re-soldered all. I still had
to grind some of the material off the nylon nut to let the miniature
slide switch seat correctly.

Oh well. I used to be a lot faster in the daze of my youth. One part
installed after 8 hours isn't something to be proud of, but I am having
fun!!

73 de Lee
KM4YY/8

174. Re: [mmr40owngrp] Re: First MMR-40 Contact

Yahoo group: mmr40owngrp
Date: 2007-05-17 13:28:50 UTC
From: Lee Mairs (SAG)
Topic: 169 Message: 174

That does it!! No more work untiol I read the entire manual again and
check off all of the parts...
73 de Lee
KM4YY/8

Alverson, Tom (Xetron) wrote:
>
> The switch goes on the other side of the board.
>
> 73 de Tom NU8D
>
>
>
> _____
>
> From: mmr40owngrp@yahoogroups.com
> <mailto:mmr40owngrp%40yahoogroups.com>
> [mailto:mmr40owngrp@yahoogroups.com
> <mailto:mmr40owngrp%40yahoogroups.com>]
> On Behalf Of Lee Mairs (SAG)
> Sent: Thursday, May 17, 2007 9:05 AM
> To: mmr40owngrp@yahoogroups.com <mailto:mmr40owngrp%40yahoogroups.com>
> Subject: Re: [mmr40owngrp] Re: First MMR-40 Contact
>
> Finally got started on my MMR 40 and wasted the entire afternoon messing
>
> with L1. I wound the coil twice getting at most 27 turns on it, I
> finally tried to re-drill the spacer, but that didn't do much other than
>
> mess up the spacer. Alas, I then noticed the "other" hank of magnet
> wire provided - the really thin #32 stuff...
>
> Thirty-nine turns fitted as specified once I used the correct wire, but
> then noticed that the mini slide switch would not fit into its location
> directly behind the third brass nut once the cool was mounted with the
> 1/4 inch nylon screw. I re-positioned the nuts so that the inboard nut
> was as far forward as possible, and then re-soldered all. I still had
> to grind some of the material off the nylon nut to let the miniature
> slide switch seat correctly.
>
> Oh well. I used to be a lot faster in the daze of my youth. One part
> installed after 8 hours isn't something to be proud of, but I am having
> fun!!
>
> 73 de Lee

> KM4YY/8
>
>

175. Getting there

Yahoo group: mmr40owngrp
Date: 2007-05-18 05:40:34 UTC
From: Garry
Topic: 175 Message: 175

Made good progress today. Got the transmitter tuned and working as I would like. 8 watts of output on cw according to my wattmeter. It could be a tad optimistic I suppose. I've only had it for a week so haven't learned the idiosyncrasy's it may have as of yet.

Still not got the mike hooked up but made a local contact on cw. Also made a few modifications. One was to the switch on the underside. I substituted a small toggle switch which is placed on the front panel to the left of the tuning knob. (I used a different box to house the radio). Much nicer to select cw/ssb.

Incidentally I was trying to remove the supplied switch and had the wife helping me. She pulled on the switch with a pair of needle nose pliers and pulled it apart which left three neat little pads for connection points. (Much easier then de-soldering the switch) Something to be aware of if anyone else wants to make that same mod. I know I'm not the first to do it.

The narrow filter does a nice job of cutting out the atmospheric noise even if it seems to drop the audio slightly. Regardless it makes for easier listening. I'd say the rig is a definite winner. Now to get a mike hooked up and try some phone contacts as well as PSK. With 5 - 6 watts of output it should be perfect on that mode.

Garry/Ve7ajj

176. Re: [mmr40owngrp] Getting there

Yahoo group: mmr40owngrp
Date: 2007-05-18 15:59:04 UTC
From: Lee Mairs (SAG)
Topic: 175 Message: 176

So far, I've got more time logged on my Hako Desoldering tool than I don
on the soldering iron!

I had a problem removing the switch - even with the Hako sucking away.
I though of a front panel switch also while reviewing yesterday's
progress [Resistors installed in the UR quadrant, and all diodes
installed. Thank goodness for my B&L binocular microscope!] At this
rate, I will be able to use the rig for SK night...

73 de Lee
KM4YY/8

Garry wrote:
>
> Made good progress today. Got the transmitter tuned and working as I
> would like. 8 watts of output on cw according to my wattmeter. It
> could be a tad optimistic I suppose. I've only had it for a week so
> haven't learned the idiosyncrasy's it may have as of yet.
>
> Still not got the mike hooked up but made a local contact on cw.
> Also made a few modifications. One was to the switch on the underside.
> I substituted a small toggle switch which is placed on the front panel
> to the left of the tuning knob. (I used a different box to house the
> radio). Much nicer to select cw/ssb.
>
> Incidentally I was trying to remove the supplied switch and had the
> wife helping me. She pulled on the switch with a pair of needle nose
> pliers and pulled it apart which left three neat little pads for
> connection points. (Much easier then de-soldering the switch)
> Something to be aware of if anyone else wants to make that same mod.
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> The narrow filter does a nice job of cutting out the atmospheric noise
> even if it seems to drop the audio slightly. Regardless it makes for
> easier listening. I'd say the rig is a definite winner. Now to get
> a mike hooked up and try some phone contacts as well as PSK. With 5 -
> 6 watts of output it should be perfect on that mode.
>
> Garry/Ve7ajj
>
>

177. MMR-40 goes to the beach

Yahoo group: mmr40owngrp
Date: 2007-05-18 17:25:57 UTC
From: Randal
Topic: 177 Message: 177

Took an extended week-end last week and brought the MMR40 and a half wave end-fed along. I usually bring one of my K2's when I visit the beach house but left it home this time. The MMR, now known as Mr. Mrrr, did a fine job. Dozens of contacts both on phone an CW. Flung a halyard as high as I could into a pine tree (35' or so) and hauled the end-fed up as a sloping vertical.

My rig will only tune down to about 7.031. thought that that may be a disadvantage but found plenty of cw stations between there and 7.045+-. At the upper end of the low range is the very bottom of the phone portion of 40 and found a bunch of folks to talk to there as well as higher up.

Brought along my FCC-2 and got a chance to cobble that into Mr. Mrrr with some clip leads and chewing gum. I'm now thinking of leaving the PTO as it is even though it go to the bottom of the cw portion but works great as a "cargo pocket rig". Then add some socket connectors to the case to connect the FCC-2 as an outboard oscillator. Then end up with a two piece rig that has dual VFO's a covers from end to end of the band.

Digital modes are next of the to do list.

72,
Ran - W1IN

178. latest MMR contacts

Yahoo group: mmr40owngrp
Date: 2007-05-19 12:30:41 UTC
From: Chris Waldrup
Topic: 178 Message: 178

I checked into a SSB net with the rig last night and was using my 40 meter inverted V that is oriented N-S. From here in central NC the net leader in Michigan said that I had a "5-9" signal, a station in TN could hear me well enough to understand me, I was solid copy in NY, and a station in Atlanta could pick me out above the noise level but could not understand every word (he said that he had a noice level fo S8 to S9). Most of these guys were running 100-500W and I am grateful that they took the time to talk to a QRP'er!

Chris
KD4PBJ

----- Original Message -----
From: Lee Mairs (SAG)
To: mmr40owngrp@yahoogroups.com
Sent: Friday, May 18, 2007 11:59 AM
Subject: Re: [mmr40owngrp] Getting there

So far, I've got more time logged on my Hako Desoldering tool than I don
on the soldering iron!

I had a problem removing the switch - even with the Hako sucking away.
I though of a front panel switch also while reviewing yesterday's
progress [Resistors installed in the UR quadrant, and all diodes
installed. Thank goodness for my B&L binocular microscope!] At this
rate, I will be able to use the rig for SK night...

73 de Lee
KM4YY/8

Garry wrote:
>
> Made good progress today. Got the transmitter tuned and working as I
> would like. 8 watts of output on cw according to my wattmeter. It
> could be a tad optimistic I suppose. I've only had it for a week so
> haven't learned the idiosyncrasy's it may have as of yet.
>
> Still not got the mike hooked up but made a local contact on cw.
> Also made a few modifications. One was to the switch on the underside.
> I substituted a small toggle switch which is placed on the front panel
> to the left of the tuning knob. (I used a different box to house the
> radio). Much nicer to select cw/ssb.
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> Incidentally I was trying to remove the supplied switch and had the
> wife helping me. She pulled on the switch with a pair of needle nose
> pliers and pulled it apart which left three neat little pads for
> connection points. (Much easier then de-soldering the switch)
> Something to be aware of if anyone else wants to make that same mod.

> I know I'm not the first to do it.
>
> The narrow filter does a nice job of cutting out the atmospheric noise
> even if it seems to drop the audio slightly. Regardless it makes for
> easier listening. I'd say the rig is a definite winner. Now to get
> a mike hooked up and try some phone contacts as well as PSK. With 5 -
> 6 watts of output it should be perfect on that mode.
>
> Garry/Ve7ajj
>
>

179. Re: [mmr40owngrp] latest MMR contacts

Yahoo group: mmr40owngrp
Date: 2007-05-19 12:33:18 UTC
From: Chris Waldrup
Topic: 178 Message: 179

sorry I should have phrased something a little differently... dipole is aimed N-S not oriented N-S.

Chris
----- Original Message -----
From: Chris Waldrup
To: mmr40owngrp@yahoogroups.com
Sent: Saturday, May 19, 2007 8:30 AM
Subject: [mmr40owngrp] latest MMR contacts

I checked into a SSB net with the rig last night and was using my 40 meter inverted V that is oriented N-S. From here in central NC the net leader in Michigan said that I had a "5-9" signal, a station in TN could hear me well enough to understand me, I was solid copy in NY, and a station in Atlanta could pick me out above the noise level but could not understand every word (he said that he had a noice level fo S8 to S9). Most of these guys were running 100-500W and I am grateful that they took the time to talk to a QRP'er!

Chris
KD4PBJ

----- Original Message -----
From: Lee Mairs (SAG)
To: mmr40owngrp@yahoogroups.com
Sent: Friday, May 18, 2007 11:59 AM
Subject: Re: [mmr40owngrp] Getting there

So far, I've got more time logged on my Hako Desoldering tool than I don
on the soldering iron!

I had a problem removing the switch - even with the Hako sucking away.
I though of a front panel switch also while reviewing yesterday's
progress [Resistors installed in the UR quadrant, and all diodes
installed. Thank goodness for my B&L binocular microscope!] At this
rate, I will be able to use the rig for SK night...

73 de Lee
KM4YY/8

Garry wrote:
>
> Made good progress today. Got the transmitter tuned and working as I
> would like. 8 watts of output on cw according to my wattmeter. It
> could be a tad optimistic I suppose. I've only had it for a week so
> haven't learned the idiosyncrasy's it may have as of yet.
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> Still not got the mike hooked up but made a local contact on cw.
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> I substituted a small toggle switch which is placed on the front panel
> to the left of the tuning knob. (I used a different box to house the
> radio). Much nicer to select cw/ssb.
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> Incidentally I was trying to remove the supplied switch and had the
> wife helping me. She pulled on the switch with a pair of needle nose
> pliers and pulled it apart which left three neat little pads for
> connection points. (Much easier then de-soldering the switch)
> Something to be aware of if anyone else wants to make that same mod.
> I know I'm not the first to do it.
>
> The narrow filter does a nice job of cutting out the atmospheric noise
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> easier listening. I'd say the rig is a definite winner. Now to get
> a mike hooked up and try some phone contacts as well as PSK. With 5 -
> 6 watts of output it should be perfect on that mode.
>
> Garry/Ve7ajj
>
>

180. Re: latest MMR contacts

Yahoo group: mmr40owngrp
Date: 2007-05-19 14:32:14 UTC
From: Randal
Topic: 178 Message: 180

Chris,

One of the secrets of success as a QRP operator, particularly on phone, is never ever tell the other station your power level until AFTER you have gotten your signal report. Most people won't believe it anyway.
72,

Ran - W1IN

181. RE: [mmr40owngrp] Re: First MMR-40 Contact

Yahoo group: mmr40owngrp
Date: 2007-05-19 18:37:02 UTC
From: Thomas Butchers
Topic: 169 Message: 181

Lee, I'm not laughing at you but I did get a chuckle at of this one….sounds like something I would do.

Tom kf4yyd

_____

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On Behalf Of Lee Mairs (SAG)
Sent: Thursday, May 17, 2007 9:29 AM
To: mmr40owngrp@yahoogroups.com
Subject: Re: [mmr40owngrp] Re: First MMR-40 Contact

That does it!! No more work untiol I read the entire manual again and check off all of the parts...
73 de Lee
KM4YY/8

Alverson, Tom (Xetron) wrote:
>
> The switch goes on the other side of the board.
>
> 73 de Tom NU8D
>
>
>
> _____-_____-_____-__
>
> From: HYPERLINK "mailto:mmr40owngrp%40yahoogroups.com"mmr40owngrp@-yahoogroups.-com
> <mailto:mmr40owngrp-%40yahoogroups.-com>
> [mailto:HYPERLINK "mailto:mmr40owngrp%40yahoogroups.com"mmr40owngrp@-yahoogroups.-com
> <mailto:mmr40owngrp-%40yahoogroups.-com>]
> On Behalf Of Lee Mairs (SAG)
> Sent: Thursday, May 17, 2007 9:05 AM
> To: HYPERLINK "mailto:mmr40owngrp%40yahoogroups.com"mmr40owngrp@-yahoogroups.-com
<mailto:mmr40owngrp-%40yahoogroups.-com>
> Subject: Re: [mmr40owngrp] Re: First MMR-40 Contact
>
> Finally got started on my MMR 40 and wasted the entire afternoon messing
>
> with L1. I wound the coil twice getting at most 27 turns on it, I
> finally tried to re-drill the spacer, but that didn't do much other than
>

> mess up the spacer. Alas, I then noticed the "other" hank of magnet
> wire provided - the really thin #32 stuff...
>
> Thirty-nine turns fitted as specified once I used the correct wire, but
> then noticed that the mini slide switch would not fit into its location
> directly behind the third brass nut once the cool was mounted with the
> 1/4 inch nylon screw. I re-positioned the nuts so that the inboard nut
> was as far forward as possible, and then re-soldered all. I still had
> to grind some of the material off the nylon nut to let the miniature
> slide switch seat correctly.
>
> Oh well. I used to be a lot faster in the daze of my youth. One part
> installed after 8 hours isn't something to be proud of, but I am having
> fun!!
>
> 73 de Lee
> KM4YY/8
>
>

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.1/807 - Release Date: 5/16/2007
6:05 PM

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.4/811 - Release Date: 5/18/2007
3:50 PM

182. RE: [mmr40owngrp] MMR-40 goes to the beach

Yahoo group: mmr40owngrp
Date: 2007-05-19 18:39:50 UTC
From: Thomas Butchers
Topic: 177 Message: 182

Ran, sounds like your having fun, looking forward to joining in and making some contacts myself.

Tom kf4yyd

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On Behalf Of Randal
Sent: Friday, May 18, 2007 1:26 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] MMR-40 goes to the beach

Took an extended week-end last week and brought the MMR40 and a half wave end-fed along. I usually bring one of my K2's when I visit the beach house but left it home this time. The MMR, now known as Mr. Mrrr, did a fine job. Dozens of contacts both on phone an CW. Flung a halyard as high as I could into a pine tree (35' or so) and hauled the end-fed up as a sloping vertical.

My rig will only tune down to about 7.031. thought that that may be a disadvantage but found plenty of cw stations between there and 7.045+-. At the upper end of the low range is the very bottom of the phone portion of 40 and found a bunch of folks to talk to there as well as higher up.

Brought along my FCC-2 and got a chance to cobble that into Mr. Mrrr with some clip leads and chewing gum. I'm now thinking of leaving the PTO as it is even though it go to the bottom of the cw portion but works great as a "cargo pocket rig". Then add some socket connectors to the case to connect the FCC-2 as an outboard oscillator. Then end up with a two piece rig that has dual VFO's a covers from end to end of the band.

Digital modes are next of the to do list.

72,
Ran - W1IN

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.3/809 - Release Date: 5/17/2007 5:18 PM

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.4/811 - Release Date: 5/18/2007

3:50 PM

183. RE: [mmr40owngrp] another mmr-40 started

Yahoo group: mmr40owngrp
Date: 2007-05-19 18:46:22 UTC
From: Thomas Butchers
Topic: 168 Message: 183

Hi Frank,

So how far have you gotten with the rig now? Hope your honey do list isn't as long as mine; I have to figure out how to remove a hard drive from the new computer and try to slave it into my old one in order to back it up. My wife's new PC BIOS died and I have to send it in for bench repair. The big issue I have is a) I'm an electrician not an IT person, and b) the new computer runs Vista and the old one runs XP, so I don't know if I'll be able to do what I need to do.

Good luck with the kit

Tom kf4yyd

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On Behalf Of frank_humpal
Sent: Sunday, May 13, 2007 11:13 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] another mmr-40 started

Hi
Got to the point of the Honey-do list that I could start on my kit this weekend. Got the L1 coil wound and soldered in place, diodes in and one quadrant of resisters in. Boy the parts are a lot smaller then the ones in the HW-8 I built years ago and/or my eye's aren't what they were. Glad I have a low power binocular microscope I got as a kid. Was even able to count the windings on L1. The saga will continual as time permits.
73
Frank KA9FZR

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.0/803 - Release Date: 5/13/2007 12:17 PM

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.4/811 - Release Date: 5/18/2007 3:50 PM

184. Re: [mmr40owngrp] another mmr-40 started

Yahoo group: mmr40owngrp
Date: 2007-05-19 19:00:05 UTC
From: Ken N9VV
Topic: 168 Message: 184

Tom, a good friend of mine is a PC Tech. He urged me to purchase one
of these IDE to USB and SATA to USB adapters. That way you don't
ever have to worry about power, slave/master, or anything like that.
Just plug it into a USB slot in the working computer ;-)
http://www.surpluscomputers.com/store/main.aspx?p=ItemDetail&item=CRD10181
and
http://www.surpluscomputers.com/store/main.aspx?p=ItemDetail&item=CRD10788
de ken n9vv

Thomas Butchers wrote:
>
>
> Hi Frank,
So how far have you gotten with the rig now? Hope your
honey
> do list isn’t as long as mine; I have to figure out how to remove a hard
> drive from the new computer and try to slave it into my old one in order
> to back it up. My wife’s new PC BIOS died and I have to send it in for
> bench repair. The big issue I have is a) I’m an electrician not an IT
> person, and b) the new computer runs Vista and the old one runs XP, so I
> don’t know if I’ll be able to do what I need to do.
> Good luck with the kit
> Tom kf4yyd

185. RE: [mmr40owngrp] another mmr-40 started

Yahoo group: mmr40owngrp
Date: 2007-05-19 20:20:28 UTC
From: Thomas Butchers
Topic: 168 Message: 185

Ken, thanks for the info! The IDE cable is what I would need to get; I'll go see if the goons at Best Buy have one (doubt it) and then will probably order it from the link you provided. HP is sending me a box and packing material to ship them my tower, I was curious why they needed to wipe my hard drive but that's what they said would happen. Thanks again for the info, now I know why it's important to do regular backups.

Tom kf4yyd

> -----Original Message-----
> From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On
> Behalf Of Ken N9VV
> Sent: Saturday, May 19, 2007 3:00 PM
> To: mmr40owngrp@yahoogroups.com
> Subject: Re: [mmr40owngrp] another mmr-40 started
>
> Tom, a good friend of mine is a PC Tech. He urged me to purchase one
> of these IDE to USB and SATA to USB adapters. That way you don't
> ever have to worry about power, slave/master, or anything like that.
> Just plug it into a USB slot in the working computer ;-)
> http://www.surpluscomputers.com/store/main.aspx?p=ItemDetail&item=CRD10181
> and
> http://www.surpluscomputers.com/store/main.aspx?p=ItemDetail&item=CRD10788
> de ken n9vv
>

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.4/811 - Release Date: 5/18/2007
3:50 PM

186. Re: [mmr40owngrp] Re: First MMR-40 Contact

Yahoo group: mmr40owngrp
Date: 2007-05-19 20:25:50 UTC
From: Lee Mairs (SAG)
Topic: 169 Message: 186

Tom -
I only have about 50 years experience putting kits together including an ATS, a 2N2-40 (my favorite and best accomplishment) and a score of other QRP transceiver offerings...

Dumb doesn't discriminate against experience...

73 de Lee
KM4YY/8

Thomas Butchers wrote:
>
> Lee, I?m not laughing at you but I did get a chuckle at of this
> one?.sounds like something I would do.
>
>
>
> Tom kf4yyd
>
>
>
> ---
>
> *From:* mmr40owngrp@yahoogroups.com
> [mailto:mmr40owngrp@yahoogroups.com] *On Behalf Of *Lee Mairs (SAG)
> *Sent:* Thursday, May 17, 2007 9:29 AM
> *To:* mmr40owngrp@yahoogroups.com
> *Subject:* Re: [mmr40owngrp] Re: First MMR-40 Contact
>
>
>
> That does it!! No more work untiol I read the entire manual again and
> check off all of the parts...
> 73 de Lee
> KM4YY/8
>
> Alverson, Tom (Xetron) wrote:
> >
> > The switch goes on the other side of the board.
> >
> > 73 de Tom NU8D
> >
> >
> >
> > _____
> >

> > From: mmr40owngrp@yahoogroups.com <mailto:mmr40owngrp%40yahoogroups.com>
> > <mailto:mmr40owngrp%40yahoogroups.com>
> > [mailto:mmr40owngrp@yahoogroups.com
> <mailto:mmr40owngrp%40yahoogroups.com>
> > <mailto:mmr40owngrp%40yahoogroups.com>]
> > On Behalf Of Lee Mairs (SAG)
> > Sent: Thursday, May 17, 2007 9:05 AM
> > To: mmr40owngrp@yahoogroups.com
> <mailto:mmr40owngrp%40yahoogroups.com>
> <mailto:mmr40owngrp%40yahoogroups.com>
> > Subject: Re: [mmr40owngrp] Re: First MMR-40 Contact
> >
> > Finally got started on my MMR 40 and wasted the entire afternoon messing
> >
> > with L1. I wound the coil twice getting at most 27 turns on it, I
> > finally tried to re-drill the spacer, but that didn't do much other than
> >
> > mess up the spacer. Alas, I then noticed the "other" hank of magnet
> > wire provided - the really thin #32 stuff...
> >
> > Thirty-nine turns fitted as specified once I used the correct wire, but
> > then noticed that the mini slide switch would not fit into its location
> > directly behind the third brass nut once the cool was mounted with the
> > 1/4 inch nylon screw. I re-positioned the nuts so that the inboard nut
> > was as far forward as possible, and then re-soldered all. I still had
> > to grind some of the material off the nylon nut to let the miniature
> > slide switch seat correctly.
> >
> > Oh well. I used to be a lot faster in the daze of my youth. One part
> > installed after 8 hours isn't something to be proud of, but I am having
> > fun!!
> >
> > 73 de Lee
> > KM4YY/8
> >
> >
>
>
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.467 / Virus Database: 269.7.1/807 - Release Date:
> 5/16/2007 6:05 PM
>
>
> No virus found in this outgoing message.
> Checked by AVG Free Edition.
> Version: 7.5.467 / Virus Database: 269.7.4/811 - Release Date:
> 5/18/2007 3:50 PM
>
>

187. RE: [mmr40owngrp] another mmr-40 started

Yahoo group: mmr40owngrp
Date: 2007-05-19 22:50:17 UTC
From: fhump@milwpc.com
Topic: 168 Message: 187

>Tom and the gang
Making progress doing the caps now. Taking my time and double checking everything. Having forty years working on electronics in various forms I have checked what happens when you make many different types of mistakes.
I think you should be able to just put the new drive in the old computer if you make it primary it will at least try to load Vista depending on your hardware. I believe that if you make it secondary you you will be able to get data off it. Haven't worked with vista gone to Linux at home. But then I've been working on computer hardware since 73.

Looking forward to getting back on the air. Haven't really been
active for many years figure this kit will give me some incentive to
get going again.
Frank
KA9FZR
>
>
>---- Original Message ----
>From: kf4yyd@...
>To: mmr40owngrp@yahoogroups.com
>Subject: RE: [mmr40owngrp] another mmr-40 started
>Date: Sat, 19 May 2007 14:46:22 -0400
>
>>Hi Frank,
>>
>>
>>
>> So how far have you gotten with the rig now? Hope your
>honey do
>>list isn☐t as long as mine; I have to figure out how to remove a
>hard drive
>>from the new computer and try to slave it into my old one in order
>to back
>>it up. My wife☐s new PC BIOS died and I have to send it in for bench
>repair.
>>The big issue I have is a) I☐m an electrician not an IT person, and
>b) the
>>new computer runs Vista and the old one runs XP, so I don☐t know if
>I☐ll be
>>able to do what I need to do.
>>
>>

>>
>>Good luck with the kit
>>
>>
>>
>>Tom kf4yyd
>>
>>
>>
>> _____
>>
>>From: mmr40owngrp@yahoogroups.com
>[mailto:mmr40owngrp@yahoogroups.com] On
>>Behalf Of frank_humpal
>>Sent: Sunday, May 13, 2007 11:13 PM
>>To: mmr40owngrp@yahoogroups.com
>>Subject: [mmr40owngrp] another mmr-40 started
>>
>>
>>
>>Hi
>>Got to the point of the Honey-do list that I could start on my kit
>>this weekend. Got the L1 coil wound and soldered in place, diodes in
>>and one quadrant of resisters in. Boy the parts are a lot smaller
>then
>>the ones in the HW-8 I built years ago and/or my eye's aren't what
>>they were. Glad I have a low power binocular microscope I got as a
>>kid. Was even able to count the windings on L1. The saga will
>>continual as time permits.
>>73
>>Frank KA9FZR
>>
>>
>>
>>
>>
>>
>>No virus found in this incoming message.
>>Checked by AVG Free Edition.
>>Version: 7.5.467 / Virus Database: 269.7.0/803 - Release Date:
>5/13/2007
>>12:17 PM
>>
>>
>>
>>No virus found in this outgoing message.
>>Checked by AVG Free Edition.
>>Version: 7.5.467 / Virus Database: 269.7.4/811 - Release Date:
>5/18/2007

>>3:50 PM
>>
>>

188. Observation.

Yahoo group: mmr40owngrp
Date: 2007-05-20 01:20:59 UTC
From: Garry
Topic: 188 Message: 188

Observation.

Hi All. I believe I mentioned in an early post that I noticed a slight drop in audio level when the cw filter was switched in. After having several more hours to play with the rig I have to say that any drop in audio is minimal. I find that the background noise is dramatically reduced and it may be that I was equating the corresponding drop in the background noise to a drop in audio level. A number of tests with my rig indicate that if the audio (cw note) is not sufficiently strong to copy with the cw filter switched in, it is unlikely that you will be able to copy the cw with the filter in the wider ssb mode.

Well I hope that makes some degree of sense.

I picked up a desk mike from the dollar store for guess what, a dollar, and now need only design or buy a momentary contact switch for the PTT to try my rig on phone. Alternately I might mount a toggle switch on the front panel of my radio to use as PTT so that I can use it to key the rig when working psk and other digital modes. That shouldn't be too hard to get used to.

I have a Toshiba pda that does an amazing job of copying psk31 using "Pocket Digi" (A great little program it appears). All that is needed is to put the pda near enough to the speaker to have clear audio tones and with no other connection it receives just fine. I haven't tried the transmit side with it yet but don't expect any issues with that. I expect that a connection between the headphone jack and the mike input of the rig will do nicely. My PDA came with a nifty folding keypad for input so entering text, provided I have a decent work surface, in the field shouldn't present any insurmountable problems. (Well that's not taking into account my lack of skill with a keyboard)

Gotta go. I hear someone calling cq. Maybe I can pick him up for a contact.

73

Garry/Ve7ajj

189. Microphones

Yahoo group: mmr40owngrp
Date: 2007-05-20 13:25:39 UTC
From: Thomas Butchers
Topic: 189 Message: 189

Hey all,

Quick technical question: I received some electric mic elements from Chris kd4pbj and I also have a condenser mic element from Radio Shack. I'm assuming that the electric element is a 600 Ohm impedance device but what about the condenser element? It looks like it has an output impedance of 1k Ohms so is that considered a high impedance device? The reason I ask is that I am experimenting with audio amps from the W1FB design notebook (trying to learn some things).

Tom kf4yyd

"Beer is proof that God loves us and wants us to be happy." -Ben Franklin

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.6/813 - Release Date: 5/20/2007 7:54 AM

190. RE: [mmr40owngrp] Observation.

Yahoo group: mmr40owngrp
Date: 2007-05-20 13:28:23 UTC
From: Thomas Butchers
Topic: 188 Message: 190

Gary Thanks for the info. I'd be interested in hearing about your PSK adventures.

Tom kf4yyd

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On Behalf Of Garry
Sent: Saturday, May 19, 2007 9:21 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Observation.

Observation.

Hi All. I believe I mentioned in an early post that I noticed a slight drop in audio level when the cw filter was switched in. After having several more hours to play with the rig I have to say that any drop in audio is minimal. I find that the background noise is dramatically reduced and it may be that I was equating the corresponding drop in the background noise to a drop in audio level. A number of tests with my rig indicate that if the audio (cw note) is not sufficiently strong to copy with the cw filter switched in, it is unlikely that you will be able to copy the cw with the filter in the wider ssb mode.

Well I hope that makes some degree of sense.

I picked up a desk mike from the dollar store for guess what, a dollar, and now need only design or buy a momentary contact switch for the PTT to try my rig on phone. Alternately I might mount a toggle switch on the front panel of my radio to use as PTT so that I can use it to key the rig when working psk and other digital modes. That shouldn't be too hard to get used to.

I have a Toshiba pda that does an amazing job of copying psk31 using "Pocket Digi" (A great little program it appears). All that is needed is to put the pda near enough to the speaker to have clear audio tones and with no other connection it receives just fine. I haven't tried the transmit side with it yet but don't expect any issues with that. I expect that a connection between the headphone jack and the mike input of the rig will do nicely. My PDA came with a nifty folding keypad for input so entering text, provided I have a decent work surface, in the field shouldn't present any insurmountable problems. (Well that's not taking into account my lack of skill with a keyboard)

Gotta go. I hear someone calling cq. Maybe I can pick him up for a contact.

73

Garry/Ve7ajj

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.6/813 - Release Date: 5/20/2007 7:54 AM

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.6/813 - Release Date: 5/20/2007 7:54 AM

191. RE: [mmr40owngrp] another mmr-40 started

Yahoo group: mmr40owngrp
Date: 2007-05-20 14:30:01 UTC
From: Thomas Butchers
Topic: 168 Message: 191

Hi Frank,

Don't blame you for taking your time. Hope you get it finished and on the air with no problems. I ordered the IDE to USB cable that Ken clued me in on, that way I only need to pull the new hard drive and hook it up to the old pc and see if I can back it up before shipment. Oh and as the group owner it is my duty to hound you to get a picture posted once you get the rig finished.

Tom kf4yyd

> -----Original Message-----
> From: fhump@... [mailto:fhump@...]
> Sent: Saturday, May 19, 2007 6:50 PM
> To: kf4yyd@...; mmr40owngrp@yahoogroups.com
> Subject: RE: [mmr40owngrp] another mmr-40 started
>
> >Tom and the gang
> Making progress doing the caps now. Taking my time and double
> checking everything. Having forty years working on electronics in
> various forms I have checked what happens when you make many
> different types of mistakes.
> I think you should be able to just put the new drive in the old
> computer if you make it primary it will at least try to load Vista
> depending on your hardware. I believe that if you make it secondary
> you you will be able to get data off it. Haven't worked with vista
> gone to Linux at home. But then I've been working on computer
> hardware since 73.
>
> Looking forward to getting back on the air. Haven't really been
> active for many years figure this kit will give me some incentive to
> get going again.
> Frank
> KA9FZR

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.6/813 - Release Date: 5/20/2007 7:54 AM

192. Re: Microphones

Yahoo group: mmr40owngrp
Date: 2007-05-20 14:34:18 UTC
From: sigcom1
Topic: 189 Message: 192

Tom, I don't know about the Radio Shack condenser element specifically but generally electret and condenser mic. elements for general use are synonymous. They are high impedance, up in the thousands of Ohms. They usually require 'bias' to operate the integral FET pre-amplifier.

73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "Thomas Butchers" <kf4yyd@...> wrote:
>
> Hey all,
>
> Quick technical question: I received some electric mic elements from Chris
> kd4pbj and I also have a condenser mic element from Radio Shack. I'm
> assuming that the electric element is a 600 Ohm impedance device but what
> about the condenser element? It looks like it has an output impedance of 1k
> Ohms so is that considered a high impedance device? The reason I ask is that
> I am experimenting with audio amps from the W1FB design notebook (trying to
> learn some things).
>
> Tom kf4yyd
>
> "Beer is proof that God loves us and wants us to be happy." -Ben Franklin
>
> No virus found in this outgoing message.
> Checked by AVG Free Edition.
> Version: 7.5.467 / Virus Database: 269.7.6/813 - Release Date: 5/20/2007
> 7:54 AM
>

193. RE: [mmr40owngrp] Re: First MMR-40 Contact

Yahoo group: mmr40owngrp
Date: 2007-05-20 14:43:09 UTC
From: Thomas Butchers
Topic: 169 Message: 193

Lee-

Ain't that the truth brother! I wasted 3/4's of my day last Wednesday hanging then re-hanging two 75 lb 400 watt high bay lights 45 feet above the deck with the associated piping I changed in the wrong place. All the other ones were in a nice straight line and then there was mine; shifted over by a good 10 feet, that was just a tad embarrassing.

Tom kf4yyd

> -----Original Message-----
> From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On
> Behalf Of Lee Mairs (SAG)
> Sent: Saturday, May 19, 2007 4:26 PM
> To: mmr40owngrp@yahoogroups.com
> Subject: Re: [mmr40owngrp] Re: First MMR-40 Contact
>
> Tom -
> I only have about 50 years experience putting kits together including an
> ATS, a 2N2-40 (my favorite and best accomplishment) and a score of other
> QRP transceiver offerings...
>
> Dumb doesn't discriminate against experience...
>
> 73 de Lee
> KM4YY/8

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.6/813 - Release Date: 5/20/2007
7:54 AM

194. RE: [mmr40owngrp] Re: Microphones

Yahoo group: mmr40owngrp
Date: 2007-05-20 15:28:50 UTC
From: Thomas Butchers
Topic: 189 Message: 194

Hi Steve,

Thanks for the answer, I must have read that part of the book 50 times and just now saw that the standard audio amp has an input impedance of 600-1000 ohms. This means I should be able to experiment with them without any problems. I also now see that his definition of high impedance is on the order of 50k Ohms. Whoo hoo look at me I’m learning!

Tom kf4yyd

_____

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On Behalf Of sigcom1
Sent: Sunday, May 20, 2007 10:34 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: Microphones

Tom, I don't know about the Radio Shack condenser element specifically but generally electret and condenser mic. elements for general use are synonymous. They are high impedance, up in the thousands of Ohms. They usually require 'bias' to operate the integral FET pre-amplifier.

73.......Steve Smith WB6TNL

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.6/813 - Release Date: 5/20/2007 7:54 AM

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.6/813 - Release Date: 5/20/2007 7:54 AM

195. photos uploaded

Yahoo group: mmr40owngrp
Date: 2007-05-20 16:58:40 UTC
From: Garry
Topic: 195 Message: 195

I uploaded 3 snaps of my still unfinished MMR-40 to photos section.

196. RE: [mmr40owngrp] photos uploaded

Yahoo group: mmr40owngrp
Date: 2007-05-20 23:14:12 UTC
From: Thomas Butchers
Topic: 195 Message: 196

Gary,

Your rig looks sharp! I like the case you have it in, makes it look classy…..

Thanks for the photos,

Tom kf4yyd

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On Behalf Of Garry
Sent: Sunday, May 20, 2007 12:59 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] photos uploaded

I uploaded 3 snaps of my still unfinished MMR-40 to photos section.

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.6/813 - Release Date: 5/20/2007 7:54 AM

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.6/813 - Release Date: 5/20/2007 7:54 AM

197. Re: photos uploaded

Yahoo group: mmr40owngrp
Date: 2007-05-21 01:20:34 UTC
From: Garry
Topic: 195 Message: 197

Tom. Thanks . The cabinet has no finish on it yet. It is from a computer power supply. Much roomier then the little plastic case (which is also nice.) The plastic case looked too small to allow some of the accessories that I am considering. I have been communicating with another MMR-40 builder who used the supplied cabinet and he mentioned that he noticed a small measure of drift in frequency with long transmissions and from start up until warm. I have not seen this yet and that has me wondering if the larger space and metal case conduct the heat away from the board better.

Are you noticing any drift from startup or after a long transmission? Much drift might make the rig difficult to use with psk. I suppose I could always use the fan (that came with the cabinet) however that will increase power consumption and I plan to use this with solar charged batteries so don't like the prospect of increasing current draw.

Garry

--- In mmr40owngrp@yahoogroups.com, "Thomas Butchers" <kf4yyd@...>
wrote:
>
> Gary,
>
>
>
> Your rig looks sharp! I like the case you have it in, makes it look
> classy ..
>
>

198. Re: Microphones

Yahoo group: mmr40owngrp
Date: 2007-05-21 11:16:05 UTC
From: Tim O'Rourke
Topic: 189 Message: 198

Tom
I believe I have a surplus cell mic with PTT, I used one on mine and sent one to Les. If U are interested I will send one to U. I have had very nice audio reports using it. I has plenty of drive also.
Tim W4YN

--- In mmr40owngrp@yahoogroups.com, "Thomas Butchers" <kf4yyd@...> wrote:
>
> Hey all,
>
> Quick technical question: I received some electric mic elements from Chris
> kd4pbj and I also have a condenser mic element from Radio Shack. I'm
> assuming that the electric element is a 600 Ohm impedance device but what
> about the condenser element? It looks like it has an output impedance of 1k
> Ohms so is that considered a high impedance device? The reason I ask is that
> I am experimenting with audio amps from the W1FB design notebook (trying to
> learn some things).
>
> Tom kf4yyd
>
> "Beer is proof that God loves us and wants us to be happy." -Ben Franklin
>
> No virus found in this outgoing message.
> Checked by AVG Free Edition.
> Version: 7.5.467 / Virus Database: 269.7.6/813 - Release Date: 5/20/2007
> 7:54 AM
>

199. RE: [mmr40owngrp] Re: photos uploaded (Drift)

Yahoo group: mmr40owngrp
Date: 2007-05-22 20:02:49 UTC
From: Thomas Butchers
Topic: 195 Message: 199

Hi Gary,

I can’t answer this yet; after finishing my board I sent it out to Steve Smith WB6TNL who was kind enough to agree to align it for me. Though if Steve is available he may be able to answer the question for you.

Tom kf4yyd

Are you noticing any drift from startup or after a long transmission?

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.6/813 - Release Date: 5/20/2007 7:54 AM

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.467 / Virus Database: 269.7.6/814 - Release Date: 5/21/2007 2:01 PM

200. PTO drift

Yahoo group: mmr40owngrp
Date: 2007-05-24 16:48:12 UTC
From: sigcom1
Topic: 195 Message: 200

Garry,

The MMR will drift with temperature change, especially on long transmissions when the heat generated by the transmitter components warms up the circuit board. I have not noticed much, if any, startup drift. At any rate, it's minimal. I would say that your larger cabinet helps the situation, as you surmised. Another idea, since you have the room, might be to construct the PTO inside a separate housing thus further isolating it from temperature changes. Of course, installing temperature compensating in the PTO circuit components would help too. 73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "Garry" <bcgas@...> wrote:
>
I have been communicating
> with another MMR-40 builder who used the supplied cabinet and he
> mentioned that he noticed a small measure of drift in frequency
with
> long transmissions and from start up until warm. I have not seen
this
> yet and that has me wondering if the larger space and metal case
> conduct the heat away from the board better.
>
> Are you noticing any drift from startup or after a long
transmission?

>
> Garry

201. T/R switching problem and small errata

Yahoo group: mmr40owngrp
Date: 2007-05-25 12:12:46 UTC
From: peterbmarks
Topic: 201 Message: 201

It's a great kit and I've enjoyed building it, but..

My receiver is incredibly deaf but if I connect the top of R3 to the antenna it seems good so I think I have a problem with Transmit/Receive switching.

In receive, according to the voltage table on page 17 the collector of Q8 should be 0V but I'm reading 13.2V.

The drain of Q12 should be 13.5V but I read 10.26V.

Note that the output of U4a (pin 1) is 0V as it should be.

Any suggestions or measurements from working circuits would be greatly appreciated.

The error I noticed, from reading the T/R switching section on page 19 closely is that it says in paragraph 1 under the heading "T/R switching": "The output of U2b now goes from it's normally low state..." I really think he means U4 as U2 is a 78L05 3 pin 5V regulator and it would be a pity to by normally low.

Can't wait to get this going.

Peter

202. Re: [mmr40owngrp] T/R switching problem and small errata

Yahoo group: mmr40owngrp
Date: 2007-05-25 13:41:06 UTC
From: Alverson, Tom (Xetron)
Topic: 201 Message: 202

Is d2 backwards?

Sent from my BlackBerry Wireless Handheld

Tom Alverson
Northrop Grumman Xetron (ES)
Cincinnati, OH

-----Original Message-----
From: mmr40owngrp@yahoogroups.com <mmr40owngrp@yahoogroups.com>
To: mmr40owngrp@yahoogroups.com <mmr40owngrp@yahoogroups.com>
Sent: Fri May 25 08:12:46 2007
Subject: [mmr40owngrp] T/R switching problem and small errata

It's a great kit and I've enjoyed building it, but..

My receiver is incredibly deaf but if I connect the top of R3 to the antenna it seems good so I think I have a problem with Transmit/Receive switching.

In receive, according to the voltage table on page 17 the collector of Q8 should be 0V but I'm reading 13.2V.

The drain of Q12 should be 13.5V but I read 10.26V.

Note that the output of U4a (pin 1) is 0V as it should be.

Any suggestions or measurements from working circuits would be greatly appreciated.

The error I noticed, from reading the T/R switching section on page 19 closely is that it says in paragraph 1 under the heading "T/R switching": "The output of U2b now goes from it's normally low state..." I really think he means U4 as U2 is a 78L05 3 pin 5V regulator and it would be a pity to by normally low.

Can't wait to get this going.

Peter

203. Re: T/R switching problem and small errata

Yahoo group: mmr40owngrp
Date: 2007-05-25 21:55:45 UTC
From: peterbmarks
Topic: 201 Message: 203

Bingo! Thanks Tom.

In fact I had put the 5.1 zener diode at that point. I hadn't noticed
it was a little glass diode marked 231B (those little glass diodes are
hard for me to read).

Incidentally, my kit was short by three 1N4148 diodes, otherwise complete.

Very best wishes,

Peter
--- In mmr40owngrp@yahoogroups.com, "Alverson, Tom (Xetron)"
<tom.alverson@...> wrote:
>
> Is d2 backwards?
>

204. Radio Shack speaker/mic.

Yahoo group: mmr40owngrp
Date: 2007-05-26 02:37:11 UTC
From: sigcom1
Topic: 204 Message: 204

Dr. Megacycle, Jim Duffey reported on QRP-L that Radio Shack's speaker mic. was on sale at 30% off at the store he visited. That made it $7. The mic. is an electret plus it has PTT and a loudspeaker. The moulded plug is wired to be compatible w/ Icom radios. Reviews on radioshack.com indicate that the transmit and receive audio quality is very good but the clip is flimsy (Personally, for $7 that wouldn't bother me). I would imagine that it would be possible to snip off the plug and wire on one compatible with the MMR. Or maybe an adaptor could be lashed together so that the mic. could be used as-is and the speaker could also be connected to the MMR's audio. I think that for mobile work a speaker/mic. might be the hot ticket.

Anyway, that's my 2 Cents. YMMV, usual disclaimers apply, yadda yadda.

73.......Steve Smith WB6TNL "Snort Rosin"

205. Good & Bad things

Yahoo group: mmr40owngrp
Date: 2007-05-26 12:20:14 UTC
From: Thomas Butchers
Topic: 205 Message: 205

Well, the accessories I need to get a QRP station on the air are coming together. Yesterday I was pleasantly surprised to receive my new Pyramid 14xx power supply; I found it on ebay for $29 and couldn't pass it up. It puts out 13.8 volts at 12 amps continuous/14 amps surge, so it should do fine for what I want it for, heck it will probably work well with a K2 but then my wife would have to agree to that so it will probably never happen.

On the bad news front my audio amp experiments are not going as planned. I have been working with the circuits from the W1FB design notebook and my measured values are coming nowhere near my calculated ones (not even within 10%).

I'm using a new (to me anyway) method of calculating the circuit values. The book is Principles of Electronic Devices and Circuits, by Lalond and Ross. The book is aimed more to technician's instead of design Engineers and uses what they call the Beta Box. The method basically uses the transistor beta value to allow you to then use Ohm's law to figure the voltage and current values around the circuit.

I was using a 2n2222 transistor and was using the min and max beta values of 100 to 300 but apparently am doing something wrong. If anyone is familiar with this book or method maybe you would be kind enough to email with how to get the correct values.

Tom kf4yyd

"Beer is proof that God loves us and wants us to be happy." -Ben Franklin

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.472 / Virus Database: 269.8.0/819 - Release Date: 5/26/2007 10:47 AM

206. Re: Radio Shack speaker/mic.

Yahoo group: mmr40owngrp
Date: 2007-05-27 00:21:29 UTC
From: Al
Topic: 204 Message: 206

Hi to the group,

I joined at the very beginning of the group and had my board built and somewhat dialed in. My first (and only) ssb contact from NY to Va on 4-17-07 (around noon) didn't have a very good report and I had to finish the contact with a Icom 746 (grr). The band was terrible that day but I was happy to know the rig worked. I used a RS speaker/mic for my rig but the speaker isn't too good. The real problem with it is the feedback produced due to some audio reaching the speaker when the rig is keyed to tx. I had to wire the gnd to the Com of the spdt ptt switch and hook the speaker gnd to the NC terminal. PTT goes to NO term. This way, when ptt is pressed, the speaker is disconnected and no feedback is produced. The mic element works fb. (I replaced the mic cord and used two plugs on the end of the new cord, one for mic/ptt and one for speaker. This way I can use the internal one or plug in a better external one. The RS amplified speaker with DSP works good by thr way.)

Well that was as far as I got and all **** broke loose here. The water bed sprung a leak, the water softener sprung a leak, and the furnace had to be replaced (which required my moving many pounds of my junk-box, er, basement). The furnace is done now and hopefully we can set up the bed with new bladder Monday. The water softener is next and (cross my fingers) then I'll be able to get back to the MMR-40!!

I've been reading all the posts and looking at the pics. (Some great looking rigs out there!) I hope to chime in here again soon. Oh, one more thing. I didn't like the small speaker so I am going to use one like the one I used for the EP-3 (bought two back then). It is from Jameco and is their # 135811CG . It is 1.6" high x 2.8" wide x 1.2" deep, 8 ohm, and rated 2w nominal & 5w max. Pricing for single units is $2.95.

72/73 Al N2ZHS
Scotia, NY

--- In mmr40owngrp@yahoogroups.com, "sigcom1" <sigcom@...> wrote:
>
> Dr. Megacycle, Jim Duffey reported on QRP-L that Radio Shack's speaker
> mic. was on sale at 30% off at the store he visited. That made it
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> radioshack.com indicate that the transmit and receive audio quality

is
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> bother me). I would imagine that it would be possible to snip off
the
> plug and wire on one compatible with the MMR. Or maybe an adaptor
> could be lashed together so that the mic. could be used as-is and
the
> speaker could also be connected to the MMR's audio. I think that
for
> mobile work a speaker/mic. might be the hot ticket.
>
> Anyway, that's my 2 Cents. YMMV, usual disclaimers apply, yadda
> yadda.
>
> 73.......Steve Smith WB6TNL "Snort Rosin"
>

207. Re: Radio Shack speaker/mic.

Yahoo group: mmr40owngrp
Date: 2007-05-27 00:47:55 UTC
From: Al
Topic: 204 Message: 207

I Should have checked Jameco before posting about the speaker I'm using. They changed the # to 135812PS and it is now $3.65 for single unit. Otherwise it's the same one.

Al N2ZHS

--- In mmr40owngrp@yahoogroups.com, "Al" <qrpme@...> wrote:
>
> Hi to the group,
>
> I joined at the very beginning of the group and had my board built
> and somewhat dialed in. My first (and only) ssb contact from NY to Va
> on 4-17-07 (around noon) didn't have a very good report and I had to
> finish the contact with a Icom 746 (grr). The band was terrible that
> day but I was happy to know the rig worked. I used a RS speaker/mic
> for my rig but the speaker isn't too good. The real problem with it
> is the feedback produced due to some audio reaching the speaker when
> the rig is keyed to tx. I had to wire the gnd to the Com of the spdt
> ptt switch and hook the speaker gnd to the NC terminal. PTT goes to
> NO term. This way, when ptt is pressed, the speaker is disconnected
> and no feedback is produced. The mic element works fb. (I replaced
> the mic cord and used two plugs on the end of the new cord, one for
> mic/ptt and one for speaker. This way I can use the internal one or
> plug in a better external one. The RS amplified speaker with DSP
> works good by thr way.)
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> Well that was as far as I got and all **** broke loose here. The
> water bed sprung a leak, the water softener sprung a leak, and the
> furnace had to be replaced (which required my moving many pounds of
> my junk-box, er, basement). The furnace is done now and hopefully we
> can set up the bed with new bladder Monday. The water softener is
> next and (cross my fingers) then I'll be able to get back to the MMR-
> 40!!
>
> I've been reading all the posts and looking at the pics. (Some great
> looking rigs out there!) I hope to chime in here again soon. Oh, one

> more thing. I didn't like the small speaker so I am going to use
one
> like the one I used for the EP-3 (bought two back then). It is from
> Jameco and is their # 135811CG . It is 1.6" high x 2.8" wide x 1.2"
> deep, 8 ohm, and rated 2w nominal & 5w max. Pricing for single
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>
> 72/73 Al N2ZHS
> Scotia, NY
>
> --- In mmr40owngrp@yahoogroups.com, "sigcom1" <sigcom@> wrote:
> >
> > Dr. Megacycle, Jim Duffey reported on QRP-L that Radio Shack's
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> > could be lashed together so that the mic. could be used as-is and
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> > speaker could also be connected to the MMR's audio. I think that
> for
> > mobile work a speaker/mic. might be the hot ticket.
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> > Anyway, that's my 2 Cents. YMMV, usual disclaimers apply, yadda
> > yadda.
> >
> > 73.......Steve Smith WB6TNL "Snort Rosin"
> >
>

208. Re: Radio Shack speaker/mic.

Yahoo group: mmr40owngrp
Date: 2007-05-27 12:24:21 UTC
From: Tim O'Rourke
Topic: 204 Message: 208

Al
I also have a couple of EP-3's maybe we can do MMR40/EP3 qso's one evening.
Tim W4YN

--- In mmr40owngrp@yahoogroups.com, "Al" <qrpme@...> wrote:
>
> Hi to the group,
>
> I joined at the very beginning of the group and had my board built
> and somewhat dialed in. My first (and only) ssb contact from NY to Va
> on 4-17-07 (around noon) didn't have a very good report and I had to
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> my junk-box, er, basement). The furnace is done now and hopefully we
> can set up the bed with new bladder Monday. The water softener is
> next and (cross my fingers) then I'll be able to get back to the MMR-
> 40!!
>
> I've been reading all the posts and looking at the pics. (Some great
> looking rigs out there!) I hope to chime in here again soon. Oh, one
> more thing. I didn't like the small speaker so I am going to use one
> like the one I used for the EP-3 (bought two back then). It is from
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> deep, 8 ohm, and rated 2w nominal & 5w max. Pricing for single units
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> 72/73 Al N2ZHS
> Scotia, NY
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> > Dr. Megacycle, Jim Duffey reported on QRP-L that Radio Shack's
> speaker
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> > moulded plug is wired to be compatible w/ Icom radios. Reviews on
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> > Anyway, that's my 2 Cents. YMMV, usual disclaimers apply, yadda
> > yadda.
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> > 73.......Steve Smith WB6TNL "Snort Rosin"
> >
>

209. MMR-40 first adjustement

Yahoo group: mmr40owngrp
Date: 2007-05-28 11:29:02 UTC
From: qrpjl1kra
Topic: 209 Message: 209

Hi Doug, Tom and all,

Absent a while, finally I did my MMR40 smoke test
yesterday. This is my first impression after adjustment.

<PTO>
Very smooth and excellent feel. I can't beleive this
PTO in ambient temperature shows such stability.
Honestly, I know this. Because I made Tin-Ear Receiver.
Coverage is adjusted by L2 gap.

<RX>
Adjustment is staight forward. T1 core did not peak
since core reached top of IFT case. BFO adjustment is
easy by monitoring duck voice to human voice.
Without AGC, stong sitation is strong, weak station is
weak like mosquito. This is the real band.
In Asia, above 7100, the upper segment is filled by
strong BC stations +20 to 30dB spectrum.
Due to this situation, weak BC image reception
occurs in over load. This masked weak amateur
stations in evening.
BC station zero-beat listening is another fun.

<TX>
In begining, Though I had a few watts, the TX output
shows drifty oscillation around 1MHz. Finally I figured out
T2 and T3 adjustment is peaky. Then I obtained 4-5W 7MHz.
I suppose to reduce sprious, I should lower the output
than maximum. I will do this work next weekend.
To adjust TX, understanding MMR-40 circuit is important.

This kit is very very interesting. I feel same excitement
as the Norcal 38 Special. Not perfect but fun.
I would like to share my experience and improve my
MMR-40 here together in ML.

JL1KRA Junichi

210. RE: [mmr40owngrp] MMR-40 first adjustement

Yahoo group: mmr40owngrp
Date: 2007-05-28 23:23:26 UTC
From: Alverson, Tom (Xetron)
Topic: 209 Message: 210

Junichi:

There is a spot for a capacitor across T1, and one is shown in the parts list (and was included in the parts bags) but is NOT supposed to be used for 40 meters (according to the text). Make sure you do not have the capacitor installed as this could cause the peaking problem with T1.

73 de Tom NU8D

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]
On Behalf Of qrpjl1kra
Sent: Monday, May 28, 2007 7:29 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] MMR-40 first adjustement

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I would like to share my experience and improve my
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JL1KRA Junichi

211. Re: MMR-40 first adjustement

Yahoo group: mmr40owngrp
Date: 2007-05-28 23:46:06 UTC
From: KF4YYD
Topic: 209 Message: 211

Hi Junichi,

Thanks for your review, did you get to make any contacts yet?

Tom kf4yyd

--- In mmr40owngrp@yahoogroups.com, "qrpjl1kra" <mx6s@...> wrote:
>
> Hi Doug, Tom and all,
>
> Absent a while, finally I did my MMR40 smoke test
> yesterday. This is my first impression after adjustment.
>
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> Very smooth and excellent feel. I can't beleive this
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> MMR-40 here together in ML.
>
> JL1KRA Junichi

>

212. Re: [mmr40owngrp] MMR-40 first adjustement

Yahoo group: mmr40owngrp
Date: 2007-05-29 00:23:44 UTC
From: Bill Linn
Topic: 209 Message: 212

Hi Tom,
I've searched the manual and cannot find a reference to this capacitor.
What is the number of this capacitor please, because all of my cap spots
are filled and I probably should remove it. Also, where are you finding
this reference in the text?

When peaking T1 on mine, it is maxed out too..

Thanks,
Bill - W7WEL

On Mon, 28 May 2007 16:23:26 -0700, Alverson, Tom (Xetron)
<tom.alverson@...> wrote:

> Junichi:
> There is a spot for a capacitor across T1, and one is shown in the parts
> list (and was included in the parts bags) but is NOT supposed to be used
> for 40 meters (according to the text). Make sure you do not have the
> capacitor installed as this could cause the peaking problem with T1.
> 73 de Tom NU8D
>
> _____
>
> From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]
> On Behalf Of qrpjl1kra
> Sent: Monday, May 28, 2007 7:29 AM
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] MMR-40 first adjustement
>
>
>
> Hi Doug, Tom and all,
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>
> JL1KRA Junichi
>
>
>
>

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Using Opera's revolutionary e-mail client: http://www.opera.com/mail/

213. RE: [mmr40owngrp] MMR-40 first adjustement

Yahoo group: mmr40owngrp
Date: 2007-05-29 00:37:52 UTC
From: Alverson, Tom (Xetron)
Topic: 209 Message: 213

Bill:

On the schematic it shows C18 (across T1) as being 0 pF which is correct for 40 meters (i.e. do not install a capacitor in that spot).

On page 8 (the parts layout) it shows C18 with a value of 000.

On page 10, it lists C18 as being a 22pF capacitor which is an error which should be corrected in the manual. I had an extra 22pF in my kit when I was done, so qrpkits probably kitted it based on that page.

At the very bottom of page 22, it says "Because Q4 adds capacitance across the tuned input IF transformer, an additional cap to resonate the 10.7 IF transformer to 7 MHz is not required. One is shown on the circuit diagram as 0 pF, in case one wants to modify the rig to work on 75 meters."

73 de Tom NU8D

-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]
On Behalf Of Bill Linn
Sent: Monday, May 28, 2007 8:24 PM
To: mmr40owngrp@yahoogroups.com
Subject: Re: [mmr40owngrp] MMR-40 first adjustement

Hi Tom,
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> top of IFT case. BFO adjustment is easy by monitoring duck voice to
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> In Asia, above 7100, the upper segment is filled by strong BC stations

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> JL1KRA Junichi
>
>
>
>

--
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Yahoo! Groups Links

214. Re: [mmr40owngrp] MMR-40 first adjustement

Yahoo group: mmr40owngrp
Date: 2007-05-29 05:52:16 UTC
From: Bill Linn
Topic: 209 Message: 214

Tom, thanks for the heads-up. I see it now... with some specific info from you. After removing C18 I'm able to peak T1 at about the middle point of the slug travel.

Bill - W7WEL

> Bill:
>
> On the schematic it shows C18 (across T1) as being 0 pF which is correct
> for 40 meters (i.e. do not install a capacitor in that spot).
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> 75 meters."
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> 73 de Tom NU8D

215. PTO not Oscillating

Yahoo group: mmr40owngrp
Date: 2007-05-31 23:55:00 UTC
From: wb8imy
Topic: 215 Message: 215

I am having difficulty getting the PTO to oscillate. I've carefully checked the windings and placement of L1 and L2 and both look good. The only anomaly I've found so far is a measurement of 1.12 V at the Source of Q14 (should be 0.57 V according to the voltage table).

Any advice appreciated.

73 . . . Steve, WB8IMY

216. Re: PTO not Oscillating

Yahoo group: mmr40owngrp
Date: 2007-06-01 00:50:05 UTC
From: Garry
Topic: 215 Message: 216

Steve.

Not sure if I can be of any help or not. When I built mine I took the advise given on the group here and built just the vfo then tried it before moving on to the rest of the board. My output was down from what others had posted and with only the few components installed it was easy to check. It turned out that I had misinterpreted the size of the coupling capacitor and that was the cause of the low output.

There are not that many components associated with the vfo and it should be a simple matter to check them out. One of the main causes for the vfo not to oscillate is the direction of the windings on L2. I suggest you take a good look at the direction that the windings are on L2 compared with L1.
I believe that they must be wound the same to keep everything in phase.

Good luck. It really is a fun rig to build.

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "wb8imy" <wb8imy@...> wrote:
>
> I am having difficulty getting the PTO to oscillate. I've carefully
> checked the windings and placement of L1 and L2 and both look good.
The
> only anomaly I've found so far is a measurement of 1.12 V at the
Source
> of Q14 (should be 0.57 V according to the voltage table).
>
> Any advice appreciated.
>
> 73 . . . Steve, WB8IMY
>

217. Re: PTO not Oscillating

Yahoo group: mmr40owngrp
Date: 2007-06-01 04:08:31 UTC
From: sigcom1
Topic: 215 Message: 217

Steve,

That is exactly the same measurements I got on Tom's radio when his PTO wouldn't oscillate. As Garry pointed out, the windings must be oriented correctly. With the leads going straight down from the toroid to the board, the core should then line up exactly with the silk screen marking on the board. If you have to turn the toroid cross-wise to the markings to make the leads connect to the appropriate pads or you have to have long leads to get it to line up then it's wound 'backwards' and the phasing of the feedback winding is wrong. I hope I have explained it clearly enough, it's sort of hard to me to explain in text. Best of luck getting it going. (and Tom, we're getting close to nailing down the power output problem that's dogged several rigs, including yours) 73.......Steve Smith WB6TNL "Snort Rosin"

--- In mmr40owngrp@yahoogroups.com, "wb8imy" <wb8imy@...> wrote:
>
> I am having difficulty getting the PTO to oscillate. I've carefully
> checked the windings and placement of L1 and L2 and both look good. The
> only anomaly I've found so far is a measurement of 1.12 V at the Source
> of Q14 (should be 0.57 V according to the voltage table).
>
> Any advice appreciated.
>
> 73 . . . Steve, WB8IMY
>

218. Power Output Was: Re: PTO not Oscillating

Yahoo group: mmr40owngrp
Date: 2007-06-01 12:16:09 UTC
From: Rob May
Topic: 215 Message: 218

>Best of luck getting it going.
>(and Tom, we're getting close to nailing down the power output
>problem that's dogged several rigs, including yours) 73.......Steve
>Smith WB6TNL "Snort Rosin"

I'm really interested in hearing the solution to this problem. It drove me crazy for a month before I gave up and sold my two MMR's.
Rob
NV5E

Make every IM count. Download Messenger and join the i?m Initiative now.
It?s free. http://im.live.com/messenger/im/home/?source=TAGHM_June07

219. Re: PTO not Oscillating--SUCCESS

Yahoo group: mmr40owngrp
Date: 2007-06-02 00:56:32 UTC
From: wb8imy
Topic: 215 Message: 219

Your advice was spot on, Steve. I removed and rewound L2 so that the leads were on the proper sides of the toroid, allowing it to drop straight into the holes without twisting. It worked! The PTO signal is a bit high at 3.065 MHz, but it still results in an acceptable range.

I have uploaded a closeup photo of the "successful" L2 version in case it may be of some help to others.

Now I am on to tuning the transmitter. I am seeing peak voltage of 8.8 V at the gate of Q10, but can't seem to get it lower than 3V after adjusting the BFO trimmer. That will take a bit more investigation.

73 . . . Steve, WB8IMY

--- In mmr40owngrp@yahoogroups.com, "sigcom1" <sigcom@...> wrote:
>
> Steve,
>
> That is exactly the same measurements I got on Tom's radio when his
> PTO wouldn't oscillate. As Garry pointed out, the windings must be
> oriented correctly. With the leads going straight down from the
> toroid to the board, the core should then line up exactly with the
> silk screen marking on the board. If you have to turn the toroid
> cross-wise to the markings to make the leads connect to the
> appropriate pads or you have to have long leads to get it to line
up
> then it's wound 'backwards' and the phasing of the feedback winding
> is wrong. I hope I have explained it clearly enough, it's sort of
> hard to me to explain in text. Best of luck getting it going.
> (and Tom, we're getting close to nailing down the power output
> problem that's dogged several rigs, including yours) 73.......Steve
> Smith WB6TNL "Snort Rosin"
>
> --- In mmr40owngrp@yahoogroups.com, "wb8imy" <wb8imy@> wrote:
> >
> > I am having difficulty getting the PTO to oscillate. I've
> carefully
> > checked the windings and placement of L1 and L2 and both look
> good. The
> > only anomaly I've found so far is a measurement of 1.12 V at the
> Source
> > of Q14 (should be 0.57 V according to the voltage table).
> >
> > Any advice appreciated.

> >
> > 73 . . . Steve, WB8IMY
> >
>

220. Re: PTO not Oscillating--SUCCESS

Yahoo group: mmr40owngrp
Date: 2007-06-02 02:42:39 UTC
From: sigcom1
Topic: 215 Message: 220

Hi Steve. That's outstanding! Glad to hear you got past that bump. Can't give you much advice on nulling the carrier. On Tom's rig it nulled right down to zero. The only thing I could suggest is double-checking the filter components and soldering, especially the cases to PCB grounds. Best of luck and keep us posted!
73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "wb8imy" <wb8imy@...> wrote:
>
>
> Your advice was spot on, Steve. I removed and rewound L2 so that the
> leads were on the proper sides of the toroid, allowing it to drop
> straight into the holes without twisting. It worked! The PTO signal
> is a bit high at 3.065 MHz, but it still results in an acceptable
> range.
>
> I have uploaded a closeup photo of the "successful" L2 version in
> case it may be of some help to others.
>
> Now I am on to tuning the transmitter. I am seeing peak voltage of
> 8.8 V at the gate of Q10, but can't seem to get it lower than 3V
> after adjusting the BFO trimmer. That will take a bit more
> investigation.
>
> 73 . . . Steve, WB8IMY

221. Re: MMR-40 first adjustement (C18 removed)

Yahoo group: mmr40owngrp
Date: 2007-06-03 10:21:08 UTC
From: qrpjl1kra
Topic: 209 Message: 221

Tom, Bill and All,

Thanks your suggestion about C18.
I removed C18 and now peaked sensitivity mamiximum
middle of the T1 core adjustment.
I should have read the instructions carefully.

By the way I did my first contact today both in CW and SSB.

Junichi JL1KRA

--- In mmr40owngrp@yahoogroups.com, "Bill Linn" <wlinn@...> wrote:
>
> Tom, thanks for the heads-up. I see it now... with some specific
info
> from you. After removing C18 I'm able to peak T1 at about the
middle point
> of the slug travel.
>
> Bill - W7WEL
>
> > Bill:
> >
> > On the schematic it shows C18 (across T1) as being 0 pF which is
correct
> > for 40 meters (i.e. do not install a capacitor in that spot).

222. Be careful to F-counter connection

Yahoo group: mmr40owngrp
Date: 2007-06-03 10:45:14 UTC
From: qrpjl1kra
Topic: 222 Message: 222

Hi All,

As I wrote, I finally compeletd my MMR-40 projects.
I faced several situation. These will be helpful for others.

In my adjustement I connected frequency counter(OHR DD-1)
to LO marked pad. During setting the DD-1 suddenly
MMR-40 did not receive any signal because the U5(SA612) dead.

I figured out U5 dead because IF 10MHz injection
received normally. The DD-1 input cheked by DVM-meter
shows momental DC voltage of 0.2V when they are switched.
This DC voltage seemed to kill the SA612.

I pulled out U5 and installed another SA612, then it
recovered. In this work a fragile pattarn to U7 4053
is broken, I fixed it too.

So I recommend all to use capacitor to connect F-counter
to the LO pad. Otherwise you will blow the SA612 in accident.

Junichi, JL1KRA

223. Panel finish by stick glue

Yahoo group: mmr40owngrp
Date: 2007-06-03 12:40:12 UTC
From: qrpjl1kra
Topic: 223 Message: 223

Hi All,

Here a tip to make your cabinet panel.
At first I thought I would prepare spray adhessive
or printable sticker sheet to finish cabinet panel.
But I see a cheep stick glue found in anywhere
work for this.

For drilling, glue B/W sheets then remove them in
hot water as shower temperature. Next glue colored
printed panel. Enough amount of stick glue need
both side and put the paper on the cabinet panel.

The template provided by qrpkits.com is accurate.
But size of square DC inlet should be little bit
larger to lower side.

Junichi JL1KRA

224. My MMR40 photo with additional switches

Yahoo group: mmr40owngrp
Date: 2007-06-03 15:04:25 UTC
From: qrpjl1kra
Topic: 224 Message: 224

Hi again All,

Forgive me to successive posts.
Recently I am quite busy on weekdays. Weekend is time to post.
I post several photo to the Photo folder.

http://ph.groups.yahoo.com/group/mmr40owngrp/photos/view/96e3?b=1
shows my MMR40 front panel.
Band segment switch is moved to leftside of PTO.
Additional power meter is installed right.
I use a modified old YUPITEL microphone to 3.5mm plug.

Tonight its fun to receive China Radio International in
upper segmant. They say their tooth paste is normal.

Junichi JL1KRA.

225. One very fun Kit!

Yahoo group: mmr40owngrp
Date: 2007-06-04 22:36:06 UTC
From: phaydenlex
Topic: 225 Message: 225

Hello, just wanted to say the MMR-40 Kit was a lot of fun to build.

If anybody every wished to try building a qrp kit, look no more, you just can't go wrong with this little Gem.

also QRPkits has a NorCal BLT Z-Match Ant. Tuner, that is also fun..

BTW First Contact on this is little puppy was from Lexington KY to Sidman PA.

Check out the photos I added at:

http://ph.groups.yahoo.com/group/mmr40owngrp/photos/browse/fadc

KI4QCS

226. Another one on the air... Any ideas on converting a PC headset MIC

Yahoo group: mmr40owngrp
Date: 2007-06-09 04:46:01 UTC
From: kg6hdh
Topic: 226 Message: 226

I just got the MMR-40 up and running. Didn't have many troubles. Observed the PC board connections, and got the PTO up on the first try.

I made some small kit changes:

1) substituted a 6-50pf trimmer for C4 (33pf). This allowed me to place the SSB in the upper part of the band by adjusting the trimmer, and the CW in the lower portion tweaking the torrid windings. (I wanted the noon time net at 7268.5, and the 7.030 QRP frequencies)

2) Power is on a small pigtail with APP out the back

3) removed the nylon screw from the end nut after hot gluing in the PTO coil. (I broke the nut off the circuit board running the screw in too far. Now it is not an issue).

4) added a speaker/headphone jack with an on-off-on switch for internal vs external speaker.

5) Tuned the rig for 7W out on CW, and got about 5W on SSB portions of the band. Power falls off much faster below the filter than above on my rig. Only got about 2W on low part of CW band when I tuned for the SSB portion. (My SSB is higher than the original design due to the separate trimmer).

My PTO screw was a little sloppy, and I wound a layer of Teflon pipe tape on the screw, and it is now as smooth as silk, and doesn't move when you take your hand off the control. I really like the PTO with the teflon tape.

I have a PC mic/headset combo I would like to convert for the rig. Any one know what it takes to modify a PC headset MIC?

Receiver sounds great and I have enjoyed the kit,
Morris
AD6ZH

227. change to large knob

Yahoo group: mmr40owngrp
Date: 2007-06-09 16:52:48 UTC
From: qrpjl1kra
Topic: 227 Message: 227

Hi all,

In this weekend, I changed a main dial knob
to a larger one.

http://ph.groups.yahoo.com/group/mmr40owngrp/photos/view/96e3?b=6

Now I feel very easy to tune around.
One finger tuning like expensive encoder controlled
is possible.
This is convenient since coverage of the PTO is
wide.

After completed, I did severel domestic QSO of
a few hundred mile distance.
Success to QSO is simple, call strong station at
strong moment.
Without S-meter and AGC, signal stength including
QSB is referred in AF sound level comparison.

During QSO, the stability of PTO is excellent.
Without expensive VC, L1+L2 design strategy
works perfect.

Only bad is my flu, cough interrupt me from
saying CQ.

Junichi JL1KRA

228. Photos of Teflon tape on PTO screw

Yahoo group: mmr40owngrp
Date: 2007-06-10 01:56:56 UTC
From: kg6hdh
Topic: 228 Message: 228

I have posted photos of the teflon tape on the PTO screw. This has worked well for me. It did two things. First, it provides lubicration, and gives smooth turning. (No friction starts, with constant "drag"). Second, it "tightens" up the system, and nothing moves when you take your fingers off the screw.

I put one layer on the screw winding it in the direction of the threads. I cut a piece of the teflon tape about 3" long, and made sure it was flat. (The stuff will wind up into a little string if you let it) Each turn overlaps the previous one by about 2/3 of the tape width. I ran it in and out of the MMR-40 several times, and then added a second layer of tape. That gave me the feel I liked.

My MMR-40 with the taped screw doesn't wiggle, and doesn't change frequency when I remove my hand from the screw. YMMV.

If you put on too much tape, the nut will cut it off, and you will have to clean the screw up and start over. I cleaned mine by running a hobby knife upside down through the threads after adding two much tape.

The knob hits the back of the case, so I turned the back of the knob in the lathe for extra clearance.

Hope this helps,
Morris
AD6ZH (Formerly KG6HDH)

229. Re: Photos of Teflon tape on PTO screw

Yahoo group: mmr40owngrp
Date: 2007-06-10 03:53:59 UTC
From: Garry
Topic: 228 Message: 229

Congratulations Morris. Sounds good. I am going to try that teflon tape idea though I suspect it won't last too long with running the screw in and out. On the other hand I find that mine is getting rather loose and sloppy and too easily bumped off frequency. I had been considering redesigning the pto (even going to a huff and puff vfo) but if your idea works well that will save me the trouble of doing that.

Thanks for the tip.

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "kg6hdh" <mojoteri@.. .> wrote:
>
> I have posted photos of the teflon tape on the PTO screw. This has
> worked well for me. It did two things. First, it provides
> lubicration, and gives smooth turning. (No friction starts, with
> constant "drag"). Second, it "tightens" up the system, and nothing
> moves when you take your fingers off the screw.
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> I put one layer on the screw winding it in the direction of the
> threads. I cut a piece of the teflon tape about 3" long, and made
> sure it was flat. (The stuff will wind up into a little string if
you
> let it) Each turn overlaps the previous one by about 2/3 of the tape
> width. I ran it in and out of the MMR-40 several times, and then
> added a second layer of tape. That gave me the feel I liked.
>
> My MMR-40 with the taped screw doesn't wiggle, and doesn't change
> frequency when I remove my hand from the screw. YMMV.
>
> If you put on too much tape, the nut will cut it off, and you will
> have to clean the screw up and start over. I cleaned mine by
running
> a hobby knife upside down through the threads after adding two much
> tape.
>
> The knob hits the back of the case, so I turned the back of the
knob
> in the lathe for extra clearance.
>
> Hope this helps,
> Morris
> AD6ZH (Formerly KG6HDH)
>

230. Re: Photos of Teflon tape on PTO screw

Yahoo group: mmr40owngrp
Date: 2007-06-10 12:34:31 UTC
From: Tim O'Rourke
Topic: 228 Message: 230

I tried a carbon steel screw and it tightened up and did not change
the tuning range. I thought it might change the inductance but it was
very close to brass screw.
Tim W4YN
--- In mmr40owngrp@yahoogroups.com, "Garry" <bcgas@...> wrote:
>
> Congratulations Morris. Sounds good. I am going to try that teflon
> tape idea though I suspect it won't last too long with running the
> screw in and out. On the other hand I find that mine is getting
> rather loose and sloppy and too easily bumped off frequency. I had
> been considering redesigning the pto (even going to a huff and puff
> vfo) but if your idea works well that will save me the trouble of
> doing that.
>
> Thanks for the tip.
>
> Garry/Ve7ajj
>
> --- In mmr40owngrp@yahoogroups.com, "kg6hdh" <mojoteri@ .> wrote:
> >
> > I have posted photos of the teflon tape on the PTO screw. This has
> > worked well for me. It did two things. First, it provides
> > lubicration, and gives smooth turning. (No friction starts, with
> > constant "drag"). Second, it "tightens" up the system, and nothing
> > moves when you take your fingers off the screw.
> >
> > I put one layer on the screw winding it in the direction of the
> > threads. I cut a piece of the teflon tape about 3" long, and made
> > sure it was flat. (The stuff will wind up into a little string if
> you
> > let it) Each turn overlaps the previous one by about 2/3 of the tape
> > width. I ran it in and out of the MMR-40 several times, and then
> > added a second layer of tape. That gave me the feel I liked.
> >
> > My MMR-40 with the taped screw doesn't wiggle, and doesn't change
> > frequency when I remove my hand from the screw. YMMV.
> >
> > If you put on too much tape, the nut will cut it off, and you will
> > have to clean the screw up and start over. I cleaned mine by
> running
> > a hobby knife upside down through the threads after adding two much
> > tape.
> >
> > The knob hits the back of the case, so I turned the back of the
> knob

> > in the lathe for extra clearance.
> >
> > Hope this helps,
> > Morris
> > AD6ZH (Formerly KG6HDH)
> >
>

231. Re: Another one on the air... Any ideas on converting a PC headset MIC

Yahoo group: mmr40owngrp
Date: 2007-06-10 18:40:11 UTC
From: sigcom1
Topic: 226 Message: 231

Morris,

Although there may be some PC headsets or mic's. with other element types, I have never seen one that was not an electret. So, it should simply be a matter of wiring your headset to match the MMR connector and adding some sort of PTT switch arrangement.

The only critical thing would be to make sure the electret polarity is correct. If it is not correct, no damage will occur to either the radio or element but you won't have any TX audio.

Best of luck with your project.

73.......Steve Smith WB6TNL
"Snort Rosin"

--- In mmr40owngrp@yahoogroups.com, "kg6hdh" <mojoteri@...> wrote:
>
> I have a PC mic/headset combo I would like to convert for the rig.
> Any one know what it takes to modify a PC headset MIC?
>
> Morris
> AD6ZH
>

232. Re: Photos of Teflon tape on PTO screw

Yahoo group: mmr40owngrp
Date: 2007-06-11 03:53:22 UTC
From: qrpjl1kra
Topic: 228 Message: 232

Hi Morris and all,

Thank you the photo of the teflon-tape.
This will be a solutuion of better PTO.
Mine also has unsteady feeling when is
is placed at high frequency of segement.

I have shorten the tuning bolt 1/4 inch
to reduce the totter.

Junich JL1KRA

> I have posted photos of the teflon tape on the PTO screw. This has
> worked well for me. It did two things. First, it provides
> lubicration, and gives smooth turning. (No friction starts, with
> constant "drag"). Second, it "tightens" up the system, and nothing
> moves when you take your fingers off the screw.

233. New Photo

Yahoo group: mmr40owngrp
Date: 2007-06-11 03:53:20 UTC
From: w7wel
Topic: 233 Message: 233

Hi all, just uploaded a picture showing my MMR-40 in its new home.

The toggle switch replaces the frequency range switch on the bottom of the PC board.

The slide switch left of it switches in a varacter diode VVC circuit to provide an additional shift upwards in frequency.

The large knob on the right provides VCC tuning via a 10 turn pot. This range is only about 1 khz per turn so it is nice for tuning SSB stations.

I changed to a larger speaker but it isn't good for SSB.. But, I have installed on the back a jack for an external speaker and find that a computer speaker has very good audio for SSB.

Also, I added a DC switch on the back which is much more convenient than upplugging it to turn it off..

I'm still wrestling with the digital dial, trying to get it a bit closer than 1.5 khz. It reads that much too high. Suggestions are welcome.

I'm still fiddling with the VVC idea, thinking that I might be able to scheme up a way to speed the tuning up a bit more, I'd like to get something like two or three khz per turn.. Never happy, I guess!... :)

Bill - W7WEL

234. w7wel new photo

Yahoo group: mmr40owngrp
Date: 2007-06-11 10:56:03 UTC
From: ter753
Topic: 234 Message: 234

Your rig looks great!. I like the way you neatly fitted the frequency display. best 73s, terry.

235. Re: New Photo

Yahoo group: mmr40owngrp
Date: 2007-06-12 11:01:53 UTC
From: Tim O'Rourke
Topic: 233 Message: 235

Have you noticed any noise from digital dial? I had to remove mine
due to interferance.
Tim W4YN
--- In mmr40owngrp@yahoogroups.com, "w7wel" <wlinn@...> wrote:
>
> Hi all, just uploaded a picture showing my
> MMR-40 in its new home.
>
> The toggle switch replaces the frequency
> range switch on the bottom of the PC board.
>
> The slide switch left of it switches in a
> varacter diode VVC circuit to provide an
> additional shift upwards in frequency.
>
> The large knob on the right provides VCC
> tuning via a 10 turn pot. This range is only
> about 1 khz per turn so it is nice for tuning
> SSB stations.
>
> I changed to a larger speaker but it isn't
> good for SSB.. But, I have installed on the
> back a jack for an external speaker and find
> that a computer speaker has very good audio
> for SSB.
>
> Also, I added a DC switch on the back which
> is much more convenient than upplugging it to
> turn it off..
>
> I'm still wrestling with the digital dial,
> trying to get it a bit closer than 1.5 khz.
> It reads that much too high. Suggestions are
> welcome.
>
> I'm still fiddling with the VVC idea,
> thinking that I might be able to scheme up a
> way to speed the tuning up a bit more, I'd
> like to get something like two or three khz
> per turn.. Never happy, I guess!... :)
>
> Bill - W7WEL
>

236. digital dial reading too high

Yahoo group: mmr40owngrp
Date: 2007-06-12 12:30:35 UTC
From: ter753
Topic: 236 Message: 236

Try adjusting the crystal frequency on your dial it may be too high in frequency. If you have a radio with a digital readout you could use that to measure the dial crystal frequency. best wishes, terry.

237. Re: New Photo

Yahoo group: mmr40owngrp
Date: 2007-06-12 15:12:45 UTC
From: w7wel
Topic: 233 Message: 237

--- In mmr40owngrp@yahoogroups.com, "Tim O'Rourke" <w4yn@...> wrote:
>
> Have you noticed any noise from digital dial? I had to remove mine
> due to interferance.
> Tim W4YN

There may be some but I haven't noticed it..:) I guess I could tune in a blank spot and then disconnect the power to the dial and see... However, it doesn't seem to introduce any at all...

The dial I'm using is one I got from Steven Weber.

Bill W7WEL

238. Re: digital dial reading too high

Yahoo group: mmr40owngrp
Date: 2007-06-12 15:18:52 UTC
From: w7wel
Topic: 236 Message: 238

--- In mmr40owngrp@yahoogroups.com,
"ter753" <ter753@...> wrote:
>
> Try adjusting the crystal frequency on your
dial it may be too high in
> frequency. If you have a radio with a
digital readout you could use
> that to measure the dial crystal frequency.
best wishes, terry.
>

Thanks Terry, I took the dial out yesterday and drilled
a hole in the enclosure that was supposed to line up
with where the adjustment cap is... wrong place! I
didn't try a second time, just lowered the frequency
the approximate amount and now I'm happy, it is still
maybe 150 cycles high. I can live with that. (Ran out
of adjustment in that direction anyway..)

Bill W7WEL

239. Re: [mmr40owngrp] Re: New Photo

Yahoo group: mmr40owngrp
Date: 2007-06-12 15:34:33 UTC
From: David Rogers
Topic: 233 Message: 239

You're up early this morning.

I don't think I ever really thanked you for that camera. It is a winner.

See you at Bud's.

David, WA7ZYQ

----- Original Message -----
From: w7wel
To: mmr40owngrp@yahoogroups.com
Sent: Tuesday, June 12, 2007 8:12 AM
Subject: [mmr40owngrp] Re: New Photo

--- In mmr40owngrp@yahoogroups.com, "Tim
O'Rourke" <w4yn@...> wrote:
>
> Have you noticed any noise from digital
dial? I had to remove mine
> due to interferance.
> Tim W4YN

There may be some but I haven't noticed
it..:) I guess I could tune in a blank spot
and then disconnect the power to the dial and
see... However, it doesn't seem to
introduce any at all...

The dial I'm using is one I got from Steven
Weber.

Bill W7WEL

240. Re: [mmr40owngrp] Re: New Photo

Yahoo group: mmr40owngrp
Date: 2007-06-12 17:26:57 UTC
From: David Rogers
Topic: 233 Message: 240

WOW!! I so did not intend for that to go to the group. Mea culpa!!

David, WA7ZYQ

----- Original Message -----
From: David Rogers
To: mmr40owngrp@yahoogroups.com
Sent: Tuesday, June 12, 2007 8:34 AM
Subject: Re: [mmr40owngrp] Re: New Photo

You're up early this morning.

I don't think I ever really thanked you for that camera. It is a winner.

See you at Bud's.

David, WA7ZYQ

----- Original Message -----
From: w7wel
To: mmr40owngrp@yahoogroups.com
Sent: Tuesday, June 12, 2007 8:12 AM
Subject: [mmr40owngrp] Re: New Photo

--- In mmr40owngrp@yahoogroups.com, "Tim
O'Rourke" <w4yn@...> wrote:
>
> Have you noticed any noise from digital
dial? I had to remove mine
> due to interferance.
> Tim W4YN

There may be some but I haven't noticed
it..:) I guess I could tune in a blank spot
and then disconnect the power to the dial and
see... However, it doesn't seem to
introduce any at all...

The dial I'm using is one I got from Steven
Weber.

Bill W7WEL

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.472 / Virus Database: 269.8.14/845 - Release Date: 6/12/2007 6:39 AM

241. Re: [mmr40owngrp] Re: New Photo

Yahoo group: mmr40owngrp
Date: 2007-06-12 17:55:41 UTC
From: Bill Linn
Topic: 233 Message: 241

Ha Ha... You're welcome.. (By the way, today is MY BIRTHDAY... :))

Bill

On Tue, 12 Jun 2007 10:26:57 -0700, David Rogers
<wa7zyq@...> wrote:

> WOW!! I so did not intend for that to go to the group. Mea culpa!!
>
> David, WA7ZYQ
>
> ----- Original Message -----
> From: David Rogers
> To: mmr40owngrp@yahoogroups.com
> Sent: Tuesday, June 12, 2007 8:34 AM
> Subject: Re: [mmr40owngrp] Re: New Photo
>
>
>
> You're up early this morning.
>
> I don't think I ever really thanked you for that camera. It is a
> winner.
>
> See you at Bud's.
>
> David, WA7ZYQ
>
> ----- Original Message -----
> From: w7wel
> To: mmr40owngrp@yahoogroups.com
> Sent: Tuesday, June 12, 2007 8:12 AM
> Subject: [mmr40owngrp] Re: New Photo
>
>
> --- In mmr40owngrp@yahoogroups.com, "Tim
> O'Rourke" <w4yn@...> wrote:
> >
> > Have you noticed any noise from digital
> dial? I had to remove mine
> > due to interferance.
> > Tim W4YN
>
>
> There may be some but I haven't noticed
> it..:) I guess I could tune in a blank spot

> and then disconnect the power to the dial and
> see... However, it doesn't seem to
> introduce any at all...
>
> The dial I'm using is one I got from Steven
> Weber.
>
> Bill W7WEL
>
>
>
>
>
>
> ---
>
>
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.472 / Virus Database: 269.8.14/845 - Release Date:
> 6/12/2007 6:39 AM

--
Using Opera's revolutionary e-mail client: http://www.opera.com/mail/

242. First Solar Power Only QSO

Yahoo group: mmr40owngrp
Date: 2007-06-14 10:01:00 UTC
From: vk2asu
Topic: 242 Message: 242

Had my first solar panel QSO yesterday on my MMR-40 (which is still just a circuit board on the bench) from Sydney to Melbourne, about 500 miles. No battery, just the solar panel through a 7812 regulator. Have wanted to do this for years and this little rig provides the ability to do it. Today the clouds rolled in so will have to wait for another blue sky day to try to increase the distance. Only using an inverted V but can see a couple of loops to form a quad antenna in my future!

My only mod so far is a 6 inch speaker through a socket plus I want to add some other bells and whistles to the rig like, AGC, frequency counter and RIT so haven't decided what box to put it in yet.

73 de John VK2ASU

243. RE: [mmr40owngrp] First Solar Power Only QSO

Yahoo group: mmr40owngrp
Date: 2007-06-14 23:24:08 UTC
From: Thomas Butchers
Topic: 242 Message: 243

Hi John,

What mode did you use?? And by the way how about a picture of your rig and panels.

Tom kf4yyd

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com] On Behalf Of vk2asu
Sent: Thursday, June 14, 2007 6:01 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] First Solar Power Only QSO

Had my first solar panel QSO yesterday on my MMR-40 (which is still just a circuit board on the bench) from Sydney to Melbourne, about 500 miles. No battery, just the solar panel through a 7812 regulator. Have wanted to do this for years and this little rig provides the ability to do it. Today the clouds rolled in so will have to wait for another blue sky day to try to increase the distance. Only using an inverted V but can see a couple of loops to form a quad antenna in my future!

My only mod so far is a 6 inch speaker through a socket plus I want to add some other bells and whistles to the rig like, AGC, frequency counter and RIT so haven't decided what box to put it in yet.

73 de John VK2ASU

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.472 / Virus Database: 269.8.15/848 - Release Date: 6/13/2007 12:50 PM

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.472 / Virus Database: 269.8.15/848 - Release Date: 6/13/2007 12:50 PM

244. Trouble with PA bias adjustment

Yahoo group: mmr40owngrp
Date: 2007-06-15 00:35:29 UTC
From: K6WV
Topic: 244 Message: 244

I am having trouble getting my MMR-40 through the last steps of bring-up. I have exhausted my expertise over the last weeks trying to debug and am forced to put my tail between my legs and seek some outside help.

A little background. I've built some kits before but I'm no EE. (I've successfully built a K2, NC2030, other kits). I had relatively little trouble getting the receive portion of the rig operating (once I removed C18 per suggestion on the list). I was also able to follow the procedure for Transmit bring-up through installation of Q10, the IRF510. However, I have been unable to effect any change in the PA bias voltage through adjustment of V3.

I set up one of my DVMs to measure current per instruction. With R10 installed, current draw is 30ma during receive and 90 ma with key-down - all to spec. However, adjusting V3 causes no increase in current draw.

I checked the voltages as presented in the trouble shooting section. All were nominal with perhaps the following exceptions -
U4 rx pin 3 is .22 v (not .11)
U4 pin 6 cw mode is .22 (not .11)
U5/6 pin 4 3.81 (not 3.58)
U7 pin 2 3.8 (not 3.22)
U7 pins 9,10,11 Tx 0.3 (not 0.0)
Q4 Tx G 11.85 (not 13.5)

My power supply is 13.4 v and the 5 v buss is at 4.95v.

I have of course checked for correct values of all R's & C's and reheated all the solder joints. I also removed and rewound all the toroid transformers and inductors.

I'm now stuck. I would appreciate any direction of what to do next to get this beastie working.

Thanks,

73, Jon K6WV

245. Re: First Solar Power Only QSO

Yahoo group: mmr40owngrp
Date: 2007-06-15 12:32:07 UTC
From: vk2asu
Topic: 242 Message: 245

--- In mmr40owngrp@yahoogroups.com, "Thomas Butchers" <kf4yyd@...>
wrote:

Hi Tom,

Mode was SSB and report was 5X9. I'm a QRPer from way, way back so 6
watts of CW is QRO to me. The rig is just the circuit board not in a
box yet. Will post a photo when I attach all the mods I want to do
and box it all up. The solar panel is an old retired commercial unit
measuring about 3 feet by 18 inches and capable of 4 amps when it
was new but down to about 2 amps now at 18 volts. It used to be part
of the solar array at a remote telemetry site. It is just the shot
to power an MMR-40 needing less than an amp at 12 volts. Rain is
forecast for the next week so it looks like being a while before I
get it out again.

John VK2ASU

>
> Hi John,
>
>
>
> What mode did you use?? And by the way how about a picture of your
rig and
> panels.
>
>
>
> Tom kf4yyd
>
>
>
> _____
>
> From: mmr40owngrp@yahoogroups.com
[mailto:mmr40owngrp@yahoogroups.com] On
> Behalf Of vk2asu
> Sent: Thursday, June 14, 2007 6:01 AM
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] First Solar Power Only QSO
>
>
>
> Had my first solar panel QSO yesterday on my MMR-40 (which is
still

> just a circuit board on the bench) from Sydney to Melbourne, about
500
> miles. No battery, just the solar panel through a 7812 regulator.
Have
> wanted to do this for years and this little rig provides the
ability
> to do it. Today the clouds rolled in so will have to wait for
another
> blue sky day to try to increase the distance. Only using an
inverted V
> but can see a couple of loops to form a quad antenna in my future!
>
> My only mod so far is a 6 inch speaker through a socket plus I
want to
> add some other bells and whistles to the rig like, AGC, frequency
> counter and RIT so haven't decided what box to put it in yet.
>
> 73 de John VK2ASU
>
>
>
>
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.472 / Virus Database: 269.8.15/848 - Release Date:
6/13/2007
> 12:50 PM
>
>
>
> No virus found in this outgoing message.
> Checked by AVG Free Edition.
> Version: 7.5.472 / Virus Database: 269.8.15/848 - Release Date:
6/13/2007
> 12:50 PM
>

246. Re: Trouble with PA bias adjustment

Yahoo group: mmr40owngrp
Date: 2007-06-15 22:40:25 UTC
From: Garry
Topic: 244 Message: 246

I am assuming that you checked v3 to ensure that it does vary when rotated? I'm no tech and was lucky not to have any issues with my mmr-40. About all I can do is sympathize cause I can't help 8>)

Garry

--- In mmr40owngrp@yahoogroups.com, K6WV <k6wv@...> wrote:
>
> I am having trouble getting my MMR-40 through the last steps of
> bring-up. I have exhausted my expertise over the last weeks trying
to
> debug and am forced to put my tail between my legs and seek some
outside
> help.
>
> A little background. I've built some kits before but I'm no EE.
(I've
> successfully built a K2, NC2030, other kits). I had relatively
little
> trouble getting the receive portion of the rig operating (once I
removed
> C18 per suggestion on the list). I was also able to follow the
> procedure for Transmit bring-up through installation of Q10, the
IRF510.
> However, I have been unable to effect any change in the PA bias
> voltage through adjustment of V3.
>
> I set up one of my DVMs to measure current per instruction. With
R10
> installed, current draw is 30ma during receive and 90 ma with key-
down -
> all to spec. However, adjusting V3 causes no increase in current
draw.
>
> I checked the voltages as presented in the trouble shooting section.
All
> were nominal with perhaps the following exceptions -
> U4 rx pin 3 is .22 v (not .11)
> U4 pin 6 cw mode is .22 (not .11)
> U5/6 pin 4 3.81 (not 3.58)
> U7 pin 2 3.8 (not 3.22)
> U7 pins 9,10,11 Tx 0.3 (not 0.0)
> Q4 Tx G 11.85 (not 13.5)
>
> My power supply is 13.4 v and the 5 v buss is at 4.95v.

>
> I have of course checked for correct values of all R's & C's and
> reheated all the solder joints. I also removed and rewound all the
> toroid transformers and inductors.
>
> I'm now stuck. I would appreciate any direction of what to do next
to
> get this beastie working.
>
> Thanks,
>
> 73, Jon K6WV
>

247. Re: [mmr40owngrp] Re: Trouble with PA bias adjustment

Yahoo group: mmr40owngrp
Date: 2007-06-16 01:53:28 UTC
From: K6WV
Topic: 244 Message: 247

Yes. I checked v3 to ensure proper operation.

Thanks for the assistance,
Jon

Garry wrote:
> I am assuming that you checked v3 to ensure that it does vary when
> rotated? I'm no tech and was lucky not to have any issues with my mmr-
> 40. About all I can do is sympathize cause I can't help 8>)
>
> Garry
>
> --- In mmr40owngrp@yahoogroups.com, K6WV <k6wv@...> wrote:
>> I am having trouble getting my MMR-40 through the last steps of
>> bring-up. I have exhausted my expertise over the last weeks trying
> to
>> debug and am forced to put my tail between my legs and seek some
> outside
>> help.
>>
>> A little background. I've built some kits before but I'm no EE.
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>> successfully built a K2, NC2030, other kits). I had relatively
> little
>> trouble getting the receive portion of the rig operating (once I
> removed
>> C18 per suggestion on the list). I was also able to follow the
>> procedure for Transmit bring-up through installation of Q10, the
> IRF510.
>> However, I have been unable to effect any change in the PA bias
>> voltage through adjustment of V3.
>>
>> I set up one of my DVMs to measure current per instruction. With
> R10
>> installed, current draw is 30ma during receive and 90 ma with key-
> down -
>> all to spec. However, adjusting V3 causes no increase in current
> draw.
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> All
>> were nominal with perhaps the following exceptions -
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>> U7 pins 9,10,11 Tx 0.3 (not 0.0)
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>>
>> My power supply is 13.4 v and the 5 v buss is at 4.95v.
>>
>> I have of course checked for correct values of all R's & C's and
>> reheated all the solder joints. I also removed and rewound all the
>> toroid transformers and inductors.
>>
>> I'm now stuck. I would appreciate any direction of what to do next
> to
>> get this beastie working.
>>
>> Thanks,
>>
>> 73, Jon K6WV
>>

248. hello all.

Yahoo group: mmr40owngrp
Date: 2007-06-16 17:30:08 UTC
From: wbdmxbaileybobbuttercup
Topic: 248 Message: 248

I just joined this group and have the MMR-40 on order.
I am looking forward to building the kit and working some of you one day.

I also ordered the SLT tuner.

looks like it will be a lot of fun.

WB7DMX

249. Re: Trouble with PA bias adjustment

Yahoo group: mmr40owngrp
Date: 2007-06-17 00:44:09 UTC
From: sigcom1
Topic: 244 Message: 249

Jon,

There are few things that will cause Q10 not to conduct:

No bias voltage on the gate of Q10
No drain voltage
No ground at source
Bad FET

Do you have 5.1 Volts at the cathode of D1 and at the 'top' of V3?

Does the voltage at the wiper of V3 go from zero to 5 Volts when the pot is adjusted?

What is the voltage range of the reading on the gate of of Q10 when V3 is rotated through it's range?

Is there approx. 13 Volts on the drain of Q10?

Is the source of Q10 zero Volts?

CAUTION: Use an Ammeter when making adjustments to V3. If the circuit starts working and you happen to have V3 cranked to an extreme position, you could smoke the Q10. If you do -not- have a current-regulated power supply that can be set to limit at 1 Amp then always have a fuse in the B+ line when testing. I recommend a 1 Amp fuse for testing even though the manual calls out for a 2 A. A good substitute during troubleshooting the bias problem would be an incandescent lamp that draws 1 Amp at full brilliance. Tf the FET goes into heavy conduction or if there is a short circuit, you will have an instant indication without needing to watch an ammeter directly.

73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, K6WV <k6wv@...> wrote:
>
> I am having trouble getting my MMR-40 through the last steps of
> bring-up. I have exhausted my expertise over the last weeks trying to
> debug and am forced to put my tail between my legs and seek some outside
> help.
>
> A little background. I've built some kits before but I'm no EE. (I've
> successfully built a K2, NC2030, other kits). I had relatively

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> trouble getting the receive portion of the rig operating (once I
removed
> C18 per suggestion on the list). I was also able to follow the
> procedure for Transmit bring-up through installation of Q10, the
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> However, I have been unable to effect any change in the PA bias
> voltage through adjustment of V3.
>
> I set up one of my DVMs to measure current per instruction. With
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> installed, current draw is 30ma during receive and 90 ma with key-
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> all to spec. However, adjusting V3 causes no increase in current
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> U7 pins 9,10,11 Tx 0.3 (not 0.0)
> Q4 Tx G 11.85 (not 13.5)
>
> My power supply is 13.4 v and the 5 v buss is at 4.95v.
>
> I have of course checked for correct values of all R's & C's and
> reheated all the solder joints. I also removed and rewound all
the
> toroid transformers and inductors.
>
> I'm now stuck. I would appreciate any direction of what to do
next to
> get this beastie working.
>
> Thanks,
>
> 73, Jon K6WV
>

250. Re: [mmr40owngrp] Re: Trouble with PA bias adjustment

Yahoo group: mmr40owngrp
Date: 2007-06-20 18:45:42 UTC
From: K6WV
Topic: 244 Message: 250

Thanks for the pointers. They enabled me to focus my tracing and I discovered that D4, the 5 V zener diode, was a short and was pulling Q10's gate to ground. I replaced D4 and everything went fine with the subsequent adjustments.

Thanks again,

73, de Jon K6WV

sigcom1 wrote:
> Jon,
>
> There are few things that will cause Q10 not to conduct:
>
> No bias voltage on the gate of Q10
> No drain voltage
> No ground at source
> Bad FET
>
> Do you have 5.1 Volts at the cathode of D1 and at the 'top' of V3?
>
> Does the voltage at the wiper of V3 go from zero to 5 Volts when the
> pot is adjusted?
>
> What is the voltage range of the reading on the gate of of Q10 when
> V3 is rotated through it's range?
>
> Is there approx. 13 Volts on the drain of Q10?
>
> Is the source of Q10 zero Volts?
>
> CAUTION: Use an Ammeter when making adjustments to V3. If the
> circuit starts working and you happen to have V3 cranked to an
> extreme position, you could smoke the Q10. If you do -not- have a
> current-regulated power supply that can be set to limit at 1 Amp
> then always have a fuse in the B+ line when testing. I recommend a
> 1 Amp fuse for testing even though the manual calls out for a 2 A.
> A good substitute during troubleshooting the bias problem would be
> an incandescent lamp that draws 1 Amp at full brilliance. Tf the
> FET goes into heavy conduction or if there is a short circuit, you
> will have an instant indication without needing to watch an ammeter
> directly.
>
> 73.......Steve Smith WB6TNL
>
>

>
>
>
> --- In mmr40owngrp@yahoogroups.com, K6WV <k6wv@...> wrote:
>> I am having trouble getting my MMR-40 through the last steps of
>> bring-up. I have exhausted my expertise over the last weeks
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>> debug and am forced to put my tail between my legs and seek some
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>> help.
>>
>> A little background. I've built some kits before but I'm no EE.
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>> successfully built a K2, NC2030, other kits). I had relatively
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>> trouble getting the receive portion of the rig operating (once I
> removed
>> C18 per suggestion on the list). I was also able to follow the
>> procedure for Transmit bring-up through installation of Q10, the
> IRF510.
>> However, I have been unable to effect any change in the PA bias
>> voltage through adjustment of V3.
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> R10
>> installed, current draw is 30ma during receive and 90 ma with key-
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>> I checked the voltages as presented in the trouble shooting
> section. All
>> were nominal with perhaps the following exceptions -
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>>
>> I have of course checked for correct values of all R's & C's and
>> reheated all the solder joints. I also removed and rewound all
> the
>> toroid transformers and inductors.
>>
>> I'm now stuck. I would appreciate any direction of what to do
> next to
>> get this beastie working.
>>

>> Thanks,
>>
>> 73, Jon K6WV
>>
>
>
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>
> Yahoo! Groups Links
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251. New DDS Photos! < Working, Waiting for Pelican Mounting Case!

Yahoo group: mmr40owngrp
Date: 2007-06-26 14:06:25 UTC
From: phaydenlex
Topic: 251 Message: 251

Well first off; this is my first attempt with SMD Components, so please take it easy on me. ;) I really did enjoy building the NorCal FCC1 (Frequency Counter),add-on module FCC2 DDS (Direct Digital Synthesis) as well as NorCal Keyer. I should add it wasn't as hard as I thought it would be... I quickly found out the magic is in the Flux not the capacitor type if you know what I mean. ;)

Now I am just waiting to top it of with a Pelican 1120 Case for mounting!

See Photos

http://ph.groups.yahoo.com/group/mmr40owngrp/photos/browse/fadc?c=

Pat
KI4QCS

252. update

Yahoo group: mmr40owngrp
Date: 2007-06-27 03:27:05 UTC
From: wbdmxbaileybobbuttercup
Topic: 252 Message: 252

just a update on my MMR-40 kit.
all assembled and went through the testing stages, mounted the final
tonight and will be setting that up tomarrow.

this has been as much fun as my HW 101 was many years ago.

with a bit of luck, it may be on the air tomarrow.

253. eHam Review on MMR-40

Yahoo group: mmr40owngrp
Date: 2007-06-28 09:31:31 UTC
From: qrpjl1kra
Topic: 253 Message: 253

Hi all,

I found MMR-40 appeared in eHam Review.
http://www.eham.net/reviews/detail/6812
Posted mine, of course.

Last weekend I used my MMR-40 for SWL.
I have only a small 12V AC adapter.
Occasionally I catched nearby strong stations.
Due to its voltage drop, it could not send CW.
But I could work them in SSB.

Junichi JL1KRA

254. MMR-40 for FD

Yahoo group: mmr40owngrp
Date: 2007-06-28 10:43:41 UTC
From: Chris Waldrup
Topic: 254 Message: 254

On Sunday before the end of FD, I decided to disconnect my K2 and try the MMR-40 to work a few sideband stations. I was throughly impressed, and worked 8 stations over a very short period.

Chris
KD4PBJ

255. Low PA Power

Yahoo group: mmr40owngrp
Date: 2007-06-28 22:16:15 UTC
From: ron_ayling
Topic: 255 Message: 255

Hi guys, I've just joined the group, and just finished building my MMR-40 like some others I'm having a lot of problems getting PA power out of the beast, the receiver is excellent, the transmitter seems to set up according to the write up all voltages seem ok but I'm only getting about 500mw output, the DC 5v bias swings from 0 to 5v on the gate of the PA and I've checked and double checked the toroid connections and coils,
one thing I've noticed is that even with full bias on the PA it only draws about 1 amp? the write up indicates it should blow a 2amp fuse, also at full bias the PA goes unstable and produces all sorts of RF rubbish, I suspect the PA device and at the moment waiting for a replacement but during the testing I've had my Roband PSU set on a 2amp limit so if it is defunct I can't understand why? I have access to quite sophisticated test equipment what would be nice is some info on a working set such as RF voltages on the PA driver and the PA itself, and perhaps at points in the filtering to the antenna, any help or info very gratefully received.
thanks from Ron g3yuh..

256. Band Select Switch

Yahoo group: mmr40owngrp
Date: 2007-07-01 06:01:52 UTC
From: Don DeGregori
Topic: 256 Message: 256

Can the BSS be brought out to the front panel? Or will doing so mess up the tuning. If so, how about diode switching, and then bring switch up front? How to? I guess operating BSS from bottom is OK. Any thoughts?
donde

257. Re: [mmr40owngrp] Band Select Switch

Yahoo group: mmr40owngrp
Date: 2007-07-01 14:38:58 UTC
From: kf4yyd@verizon.net
Topic: 256 Message: 257

Can the BSS be brought out to the front panel? Or will doing so mess up
the tuning.

Hi Don,

Yes the band select switch can be moved up front, if you look back through the older messages you will find some ways of doing this. I beleive there are also a couple of pictures in the photo section which shows the finished results.

This is a mod I will probably do myself.

Tom kf4yyd
Fredericksburg Va

258. MMR-40 on 75/80 meters

Yahoo group: mmr40owngrp
Date: 2007-07-02 01:31:16 UTC
From: jflint5429
Topic: 258 Message: 258

There is a reference in the manual for the mmr-40 about converting to
75 meters

has anyone done this?

what would be involved?

Thanks
KD8EZS

259. Re: Band Select Switch

Yahoo group: mmr40owngrp
Date: 2007-07-02 17:06:15 UTC
From: qrpjl1kra
Topic: 256 Message: 259

Don and Tom,

I did BSS replacement mod. You may see mine in photos folder.
The BSS was moved to left side of PTO tune.
It hooked up to its original position minimum length wires.
I dont see any problem.

Junichi JL1KRA

> Can the BSS be brought out to the front panel? Or will doing so mess up
> the tuning.
>
> Hi Don,
>
> Yes the band select switch can be moved up front, if you look back
through the older messages you will find some ways of doing this. I
beleive there are also a couple of pictures in the photo section which
shows the finished results.
>
> This is a mod I will probably do myself.
>
> Tom kf4yyd
> Fredericksburg Va
>

260. Re: Low PA Power

Yahoo group: mmr40owngrp
Date: 2007-07-03 00:16:37 UTC
From: KF4YYD
Topic: 255 Message: 260

--- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@...> wrote:
>
> Hi guys, I've just joined the group, and just finished building my
MMR-
> 40 like some others I'm having a lot of problems getting PA power out
> of the beast, the receiver is excellent

Hi Ron,

My radio is one of the ones that is sharing your problem. I can't answer your question but I can say that there are people working on the issue. Hopefully, the problem will be solved shortly and those involved will be posting what they have found. I know tat is a stupid answer but I am keeping my fingers crossed.

Tom kf4yyd

261. Re: Low PA Power

Yahoo group: mmr40owngrp
Date: 2007-07-03 07:41:13 UTC
From: ron_ayling
Topic: 255 Message: 261

Hi Tom
Thanks for the reply, nice to know I'm not on my own with this
problem it would be interesting to know what percentage of the kits
are failing and why, my MMR-40 is now at the local University
being "examined" by brains more agile than mine, if anything
transpires I'll post it here.
cheers
from Ron g3yuh...

--- In mmr40owngrp@yahoogroups.com, "KF4YYD" <kf4yyd@...> wrote:
>
> --- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@>
wrote:
> >
> > Hi guys, I've just joined the group, and just finished building
my
> MMR-
> > 40 like some others I'm having a lot of problems getting PA power
out
> > of the beast, the receiver is excellent
>
>
> Hi Ron,
>
> My radio is one of the ones that is sharing your problem. I can't
> answer your question but I can say that there are people working on
the
> issue. Hopefully, the problem will be solved shortly and those
involved
> will be posting what they have found. I know tat is a stupid answer
but
> I am keeping my fingers crossed.
>
> Tom kf4yyd
>

262. Re: MMR-40 on 75/80 meters

Yahoo group: mmr40owngrp
Date: 2007-07-03 22:53:58 UTC
From: sigcom1
Topic: 258 Message: 262

Steve Weber has alluded to having done it.

Off the top of my head, if the PTO was kept in the same approximate range then the I.F. would need to be changed to something in the 6 MHz range along with the associate tuned circuits. If the 10 MHz I.F. was left as-is, then the PTO would need to cover 6 to 6.5 MHz. Stability might be a problem up there but then again, maybe not. The receiver front-end tuned circuit and the transmitter bandpass filter and output filter would have to be changed. I don't know if the same 'cans' could be used simply by padding or if something closer to 4 MHz would be needed. A kicker might be that the tuned circuits would be narrower in bandwidth.

FWIW, the saga continues on the power output issue.

73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "jflint5429" <kjzwilliams@...>
wrote:
>
> There is a reference in the manual for the mmr-40 about converting
to
> 75 meters
>
> has anyone done this?
>
> what would be involved?
>
> Thanks
> KD8EZS
>

263. PTO Frequency to high

Yahoo group: mmr40owngrp
Date: 2007-07-04 01:01:37 UTC
From: ve3sjb
Topic: 263 Message: 263

I just finished building my MMR-40 and started the first tune up stage. The PTO is running ,with the screw in all the way and the BSS switch all the way forward, at a frequency of 3147.5 khz..... so im thinking that maybe i have to switch the L2 around... can i desolder it, turn it 180 degrees and re-solder it???? or do i have to break down and re wind it?

I stopped playing with it after 40 minutes of playing around with the windings on L2... i was getting to fustrated lol...

L1 has 39 windings as specified and L2 is wound as the instructions say...

any ideas anyone?

-Stephan VE3SJB

264. Re: PTO Frequency to high

Yahoo group: mmr40owngrp
Date: 2007-07-04 01:47:31 UTC
From: wbdmxbaileybobbuttercup
Topic: 263 Message: 264

--- In mmr40owngrp@yahoogroups.com, "ve3sjb" <ve3sjb@...> wrote:
>
> I just finished building my MMR-40 and started the first tune up
stage.
> The PTO is running ,with the screw in all the way and the BSS
switch
> all the way forward, at a frequency of 3147.5 khz..... so im
thinking
> that maybe i have to switch the L2 around... can i desolder it,
turn
> it 180 degrees and re-solder it???? or do i have to break down and
re
> wind it?
>
> I stopped playing with it after 40 minutes of playing around with
the
> windings on L2... i was getting to fustrated lol...
>
> L1 has 39 windings as specified and L2 is wound as the
instructions say...
>
> any ideas anyone?
>
> -Stephan VE3SJB
>

yes, if L2 is in backwards, it will be high in freq.
change it very carefully and it should come back down to the normal
range, then you can tweak the freq by adjusting the spaceing on L2
as the manual says.

265. RE: [mmr40owngrp] PTO Frequency to high

Yahoo group: mmr40owngrp
Date: 2007-07-04 02:20:42 UTC
From: fhump@milwpc.com
Topic: 263 Message: 265

I was in the same boat with the freq on the PTO and in a moment of frustration just added the extra cap that came with the kit in parallel with c8 in the circuit to bring the freq down seems to have worked so far and was a lot easier then rewinding the coils. Just a thought. I have mine up and running but the band conditions haven't let me contact anyone yet will keep trying
73
Frank
KA9FZR

---- Original Message ----
From: ve3sjb@...
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] PTO Frequency to high
Date: Wed, 04 Jul 2007 01:01:37 -0000

>I just finished building my MMR-40 and started the first tune up
>stage.
>The PTO is running ,with the screw in all the way and the BSS switch
>all the way forward, at a frequency of 3147.5 khz..... so im thinking
>that maybe i have to switch the L2 around... can i desolder it, turn
>it 180 degrees and re-solder it???? or do i have to break down and re
>wind it?
>
>I stopped playing with it after 40 minutes of playing around with the
>windings on L2... i was getting to fustrated lol...
>
>L1 has 39 windings as specified and L2 is wound as the instructions
>say...
>
>any ideas anyone?
>
>-Stephan VE3SJB
>

266. Re: PTO Frequency to high

Yahoo group: mmr40owngrp
Date: 2007-07-04 03:03:38 UTC
From: ve3sjb
Topic: 263 Message: 266

hmm, thats a 22pF cap too as i recall right?

--- In mmr40owngrp@yahoogroups.com, fhump@... wrote:
>
> I was in the same boat with the freq on the PTO and in a moment of
> frustration just added the extra cap that came with the kit in
> parallel with c8 in the circuit to bring the freq down seems to have
> worked so far and was a lot easier then rewinding the coils. Just a
> thought. I have mine up and running but the band conditions haven't
> let me contact anyone yet will keep trying
> 73
> Frank
> KA9FZR
>
>
> ---- Original Message ----
> From: ve3sjb@...
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] PTO Frequency to high
> Date: Wed, 04 Jul 2007 01:01:37 -0000
>
> >I just finished building my MMR-40 and started the first tune up
> >stage.
> >The PTO is running ,with the screw in all the way and the BSS switch
> >all the way forward, at a frequency of 3147.5 khz..... so im thinking
> >that maybe i have to switch the L2 around... can i desolder it, turn
> >it 180 degrees and re-solder it???? or do i have to break down and re
> >wind it?
> >
> >I stopped playing with it after 40 minutes of playing around with the
> >windings on L2... i was getting to fustrated lol...
> >
> >L1 has 39 windings as specified and L2 is wound as the instructions
> >say...
> >
> >any ideas anyone?
> >
> >-Stephan VE3SJB
> >
>

267. Re: PTO Frequency to high

Yahoo group: mmr40owngrp
Date: 2007-07-04 03:08:40 UTC
From: wbdmxbaileybobbuttercup
Topic: 263 Message: 267

--- In mmr40owngrp@yahoogroups.com, "ve3sjb" <ve3sjb@...> wrote:
>
> I just finished building my MMR-40 and started the first tune up
stage.
> The PTO is running ,with the screw in all the way and the BSS
switch
> all the way forward, at a frequency of 3147.5 khz..... so im
thinking
> that maybe i have to switch the L2 around... can i desolder it,
turn
> it 180 degrees and re-solder it???? or do i have to break down and
re
> wind it?
>
> I stopped playing with it after 40 minutes of playing around with
the
> windings on L2... i was getting to fustrated lol...
>
> L1 has 39 windings as specified and L2 is wound as the
instructions say...
>
> any ideas anyone?
>
> -Stephan VE3SJB
>
the extra cap that came in my kit is marked 331, but when measured
it reads 97pf

could this be the reason that the extra cap is in the parts ?

I may just add it to my kit as it is now , it is possible to xtmit
below the 7.000 band limit.

268. Re: PTO Frequency to high

Yahoo group: mmr40owngrp
Date: 2007-07-04 04:15:03 UTC
From: wbdmxbaileybobbuttercup
Topic: 263 Message: 268

--- In mmr40owngrp@yahoogroups.com, "ve3sjb" <ve3sjb@...> wrote:
>
> I just finished building my MMR-40 and started the first tune up
stage.
> The PTO is running ,with the screw in all the way and the BSS
switch
> all the way forward, at a frequency of 3147.5 khz..... so im
thinking
> that maybe i have to switch the L2 around... can i desolder it,
turn
> it 180 degrees and re-solder it???? or do i have to break down and
re
> wind it?
>
> I stopped playing with it after 40 minutes of playing around with
the
> windings on L2... i was getting to fustrated lol...
>
> L1 has 39 windings as specified and L2 is wound as the
instructions say...
>
> any ideas anyone?
>
> -Stephan VE3SJB
>
ok, here is what I did on mine tonight.

the extra cap was infact a 97pf and took things out of band,
so I installed a 15 pf cap across c8 and that put things right in
line where its supposed to be and then I fine tuned it with the
spacing of the l2 toroid windings, it didn't take much movement to
set the band edge at 7.010 for a safty margen.

WB7DMX

269. Re: PTO Frequency to high

Yahoo group: mmr40owngrp
Date: 2007-07-04 05:01:59 UTC
From: Garry
Topic: 263 Message: 269

I didn't have to use a cap to bring my frequency range into where I wanted it. I tweaked the coil until I had the bottom frequency set to 7.002 and decided to leave it there so I would have a small margin of safety. Later I moved the band switch from the underside of the board to the front panel and doing that added sufficient capacitance between the wires (I guess) to put my lowest useable frequency at 7.015. I left it there.

I notice also, that I have a fair amount of overlap between the low band and the high band. I may just go back in and see if I can shift the high band a bit higher so that I can access the QRP sideband frequency which is 7.285 , I believe. As the rig is now, I can only get to 7.265.

I still have only made the one contact on ssb with the rig. About the time I finished building it I picked up a Ten Tec (Ebay) and have been having too much fun with it on CW at QRP levels.

I'll get back to the MMR-40 shortly. I have decided to order the FCC1 for frequency readout. It seems I rather miss having an accurate frequency display.

Garry/Ve7ajj

270. Re: PTO Frequency to high - fixed

Yahoo group: mmr40owngrp
Date: 2007-07-04 16:01:46 UTC
From: ve3sjb
Topic: 263 Message: 270

Ok so i flipped L2 around and added a 33pF cap.. and were in
business... 22pF never brought it down enough, but 33pF with out even
touching the windings on L2 brought it to 3.0005 khz... perfect.
one quick poke at the windings to give my self 2khz of clearance and
away we go.

Stephan VE3SJB

--- In mmr40owngrp@yahoogroups.com, "ve3sjb" <ve3sjb@...> wrote:
>
> I just finished building my MMR-40 and started the first tune up stage.
> The PTO is running ,with the screw in all the way and the BSS switch
> all the way forward, at a frequency of 3147.5 khz..... so im thinking
> that maybe i have to switch the L2 around... can i desolder it, turn
> it 180 degrees and re-solder it???? or do i have to break down and re
> wind it?
>
> I stopped playing with it after 40 minutes of playing around with the
> windings on L2... i was getting to fustrated lol...
>
> L1 has 39 windings as specified and L2 is wound as the instructions
say...
>
> any ideas anyone?
>
> -Stephan VE3SJB
>

271. Re: PTO Frequency to high

Yahoo group: mmr40owngrp
Date: 2007-07-04 16:07:02 UTC
From: wbdmxbaileybobbuttercup
Topic: 263 Message: 271

--- In mmr40owngrp@yahoogroups.com, "ve3sjb" <ve3sjb@...> wrote:
>
> I just finished building my MMR-40 and started the first tune up
stage.
> The PTO is running ,with the screw in all the way and the BSS
switch
> all the way forward, at a frequency of 3147.5 khz..... so im
thinking
> that maybe i have to switch the L2 around... can i desolder it,
turn
> it 180 degrees and re-solder it???? or do i have to break down and
re
> wind it?
>
> I stopped playing with it after 40 minutes of playing around with
the
> windings on L2... i was getting to fustrated lol...
>
> L1 has 39 windings as specified and L2 is wound as the
instructions say...
>
> any ideas anyone?
>
> -Stephan VE3SJB
>

very good,
now that it is at the freq we want, should we seal it with hotmelt
gkue so it don't change on us ?

I think my next step is to add the digital display to it so I will
know the freq quickly.
WB7DMX

272. Re: PTO Frequency to high

Yahoo group: mmr40owngrp
Date: 2007-07-04 18:03:18 UTC
From: ve3sjb
Topic: 263 Message: 272

i gave the coil a nice painting of clear nail polish... i have to pick up some hot glue, but i may just use a bit of candle wax.... melt it in a small cup and spoon it on to it... i find that method works, i have used it before.

--- In mmr40owngrp@yahoogroups.com, "wbdmxbaileybobbuttercup" <wb7dmx@...> wrote:
>
> --- In mmr40owngrp@yahoogroups.com, "ve3sjb" <ve3sjb@> wrote:
> >
> > I just finished building my MMR-40 and started the first tune up
> stage.
> > The PTO is running ,with the screw in all the way and the BSS
> switch
> > all the way forward, at a frequency of 3147.5 khz..... so im
> thinking
> > that maybe i have to switch the L2 around... can i desolder it,
> turn
> > it 180 degrees and re-solder it???? or do i have to break down and
> re
> > wind it?
> >
> > I stopped playing with it after 40 minutes of playing around with
> the
> > windings on L2... i was getting to fustrated lol...
> >
> > L1 has 39 windings as specified and L2 is wound as the
> instructions say...
> >
> > any ideas anyone?
> >
> > -Stephan VE3SJB
> >
>
> very good,
> now that it is at the freq we want, should we seal it with hotmelt
> gkue so it don't change on us ?
>
> I think my next step is to add the digital display to it so I will
> know the freq quickly.
> WB7DMX
>

273. Re: PTO Frequency to high

Yahoo group: mmr40owngrp
Date: 2007-07-04 18:50:27 UTC
From: Garry
Topic: 263 Message: 273

Stephan

I used the candle wax. I'm thinking that the wax might be easier to undo if the need to make a change should arise though I can't imaging why it would. HI. The wax seems to hold it just fine.

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "ve3sjb" <ve3sjb@...> wrote:
>
> i gave the coil a nice painting of clear nail polish... i have to pick
> up some hot glue, but i may just use a bit of candle wax.... melt it
> in a small cup and spoon it on to it... i find that method works, i
> have used it before.
>
>
> --- In mmr40owngrp@yahoogroups.com, "wbdmxbaileybobbuttercup"
> <wb7dmx@> wrote:
> >
> > --- In mmr40owngrp@yahoogroups.com, "ve3sjb" <ve3sjb@> wrote:
> > >
> > > I just finished building my MMR-40 and started the first tune up
> > stage.
> > > The PTO is running ,with the screw in all the way and the BSS
> > switch
> > > all the way forward, at a frequency of 3147.5 khz..... so im
> > thinking
> > > that maybe i have to switch the L2 around... can i desolder it,
> > turn
> > > it 180 degrees and re-solder it???? or do i have to break down
> and
> > re
> > > wind it?
> > >
> > > I stopped playing with it after 40 minutes of playing around
> with
> > the
> > > windings on L2... i was getting to fustrated lol...
> > >
> > > L1 has 39 windings as specified and L2 is wound as the
> > instructions say...
> > >
> > > any ideas anyone?
> > >
> > > -Stephan VE3SJB

> > >
> >
> > very good,
> > now that it is at the freq we want, should we seal it with
hotmelt
> > gkue so it don't change on us ?
> >
> > I think my next step is to add the digital display to it so I
will
> > know the freq quickly.
> > WB7DMX
> >
>

274. 33 pf

Yahoo group: mmr40owngrp
Date: 2007-07-05 03:57:01 UTC
From: Don DeGregori
Topic: 274 Message: 274

The parts list shows 6 33pf caps. But the board layout shows 7. I received 6 of these caps. Am I looking at something wrong? Do I need the 7th one?
donde

275. Frustration

Yahoo group: mmr40owngrp
Date: 2007-07-05 05:27:44 UTC
From: ve3sjb
Topic: 275 Message: 275

Hello....

Ok so I got the PTO up and running nice, tuned up the receiver... did the BFO alignment... then did all the steps up to putting in the final power transistor.. i had a nice side tone... everything was working 100% up untill i threw in the last power transistor... first... the case of the power transistor shorted to the heat sink... instructions say that it should not happen, but that was cured by throwing in a insulator from the junk box... so that was solved... but i started the first steps of the setup with the power transistor in, and guess what. No side tone, low RF power out 1-2W PEP, and best of all, when i put my SSB receiver becide the dummy load... the CW note is non existant, and its producing a whole bunch of awful hash...

I havent looked at the power output on the oscilloscope yet but thats for tomorrow, i was going to play baseball with that radio earlier today... i had to walk away from it for the evening. I even went as far as useing just a mono phone plug with a switch on it, to key the rig to make sure it wasn't my pile of junk home brew cw key....

any ideas would be awesome, ill check back here in the mouring, and post more details... mabey some pix too... if i can find my digi cam HI HI....

73 de VE3SJB
Stephan

276. Re: Frustration

Yahoo group: mmr40owngrp
Date: 2007-07-05 13:12:43 UTC
From: ron_ayling
Topic: 275 Message: 276

Looks as if you have joined the MMR-40 low power problem club, have a look at past msgs
from Ron...

--- In mmr40owngrp@yahoogroups.com, "ve3sjb" <ve3sjb@...> wrote:
>
> Hello....
>
> Ok so I got the PTO up and running nice, tuned up the receiver... did
> the BFO alignment... then did all the steps up to putting in the
> final power transistor.. i had a nice side tone... everything was
> working 100% up untill i threw in the last power transistor...
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> instructions say that it should not happen, but that was cured by
> throwing in a insulator from the junk box... so that was solved...
> but i started the first steps of the setup with the power transistor
> in, and guess what. No side tone, low RF power out 1-2W PEP, and best
> of all, when i put my SSB receiver becide the dummy load... the CW
> note is non existant, and its producing a whole bunch of awful
> hash...
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> I havent looked at the power output on the oscilloscope yet but thats
> for tomorrow, i was going to play baseball with that radio earlier
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> far as useing just a mono phone plug with a switch on it, to key the
> rig to make sure it wasn't my pile of junk home brew cw key....
>
> any ideas would be awesome, ill check back here in the mouring, and
> post more details... mabey some pix too... if i can find my digi cam
> HI HI....
>
> 73 de VE3SJB
> Stephan
>

277. RE: [mmr40owngrp] Frustration

Yahoo group: mmr40owngrp
Date: 2007-07-05 16:15:22 UTC
From: Rob May
Topic: 275 Message: 277

Stephan,
I and others have had this problem. After a couple of months of pulling my hair out I sold both of mine for a bargain price (I had bought a second one to see what I did wrong on the first one, they both had low power output, 1.25 watts on one and 3 watts on the other). Both tested ok up until the PA transistor was put in. Steve Smith and others are working on this problem and I think that they've mentioned some progress. Good luck.
Rob
NV5E

>From: "ve3sjb" <ve3sjb@...>
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Frustration
>Date: Thu, 05 Jul 2007 05:27:44 -0000
>
>Hello....
>
>Ok so I got the PTO up and running nice, tuned up the receiver... did
>the BFO alignment... then did all the steps up to putting in the
>final power transistor.. i had a nice side tone... everything was
>working 100% up untill i threw in the last power transistor...
>first... the case of the power transistor shorted to the heat sink...
>instructions say that it should not happen, but that was cured by
>throwing in a insulator from the junk box... so that was solved...
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>in, and guess what. No side tone, low RF power out 1-2W PEP, and best
>of all, when i put my SSB receiver becide the dummy load... the CW
>note is non existant, and its producing a whole bunch of awful
>hash...
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>I havent looked at the power output on the oscilloscope yet but thats
>for tomorrow, i was going to play baseball with that radio earlier
>today... i had to walk away from it for the evening. I even went as
>far as useing just a mono phone plug with a switch on it, to key the
>rig to make sure it wasn't my pile of junk home brew cw key....
>
>any ideas would be awesome, ill check back here in the mouring, and
>post more details... mabey some pix too... if i can find my digi cam
>HI HI....
>
>73 de VE3SJB
>Stephan
>

---
http://liveearth.msn.com

278. Re: Frustration

Yahoo group: mmr40owngrp
Date: 2007-07-05 16:22:50 UTC
From: ve3sjb
Topic: 275 Message: 278

Well, i wonder if this problem has anything to do with the cap's that
came with my kit, almost all of them with the exception of the
electrolytic caps, are too big... the 104 caps are all atleast 1.5x
the spacing of the holes on the board.. they are like 0.2" not 0.1"
so there are a lot of caps on the board that have 'custom bent leads'
to make them fit... it could also be my improvisation... my kit was
missing ... something like 4 caps, 2 diodes, a nylon screw, and like 3
resistors... so i went to the local electronics store, got what i
needed... everything i bought is to proper spec's... if i needed 22pf,
i got 22pf... but yeah. i wonder if anyone else noticed this about
some of the cap's in the kit...

but im going to play with this radio tonight, de-solder the PA, and
redo all my alignments, check the voltages onces, twice and a third
time again... then solder it back in... and see what happens... i
might even break out the oscilloscope again...

73 de VE3SJB
Stephan
ve3sjb.com

--- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@...> wrote:
>
> Looks as if you have joined the MMR-40 low power problem club, have a
> look at past msgs
> from Ron...
>
>
> --- In mmr40owngrp@yahoogroups.com, "ve3sjb" <ve3sjb@> wrote:
> >
> > Hello....
> >
> > Ok so I got the PTO up and running nice, tuned up the receiver...
> did
> > the BFO alignment... then did all the steps up to putting in the
> > final power transistor.. i had a nice side tone... everything was
> > working 100% up untill i threw in the last power transistor...
> > first... the case of the power transistor shorted to the heat
> sink...
> > instructions say that it should not happen, but that was cured by
> > throwing in a insulator from the junk box... so that was solved...
> > but i started the first steps of the setup with the power
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> > in, and guess what. No side tone, low RF power out 1-2W PEP, and
> best
> > of all, when i put my SSB receiver becide the dummy load... the CW

> > note is non existant, and its producing a whole bunch of awful
> > hash...
> >
> > I havent looked at the power output on the oscilloscope yet but
> thats
> > for tomorrow, i was going to play baseball with that radio earlier
> > today... i had to walk away from it for the evening. I even went as
> > far as useing just a mono phone plug with a switch on it, to key
> the
> > rig to make sure it wasn't my pile of junk home brew cw key....
> >
> > any ideas would be awesome, ill check back here in the mouring, and
> > post more details... mabey some pix too... if i can find my digi
> cam
> > HI HI....
> >
> > 73 de VE3SJB
> > Stephan
> >
>

279. RE: [mmr40owngrp] Re: Frustration

Yahoo group: mmr40owngrp
Date: 2007-07-05 17:30:54 UTC
From: Rob May
Topic: 275 Message: 279

Yeah, a lot of the caps had the wrong lead spacing, I didn't find that much of an issue. I just rebent the leads carefully with needlenose pliers. I wasn't missing any parts in either kit. If all your voltage measurements before putting in the PA transistor are fine, you should be ok. I would really like to figure out what the problem is. I'm an electronic tech and a very active kit builder and it beat me! Hope you have better luck.
Rob
NV5E

>From: "ve3sjb"
><ve3sjb@...>http://by111fd.bay111.hotmail.msn.com/cgi-bin/compose?type=ra&msg=D02B1937-5E6D-4FE5-9F79-9600BFF96AF3&start=0&len=21902&curmbox=00000000%2d0000%2d0000%2d0000%2d000000000001&a=5a216c243317da30e0cc76417c63622fcd792ed243c7b8a7e6b53438efac568b#
Send
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Re: Frustration
>Date: Thu, 05 Jul 2007 16:22:50 -0000
>
>Well, i wonder if this problem has anything to do with the cap's that
>came with my kit, almost all of them with the exception of the
>electrolytic caps, are too big... the 104 caps are all atleast 1.5x
>the spacing of the holes on the board.. they are like 0.2" not 0.1"
>so there are a lot of caps on the board that have 'custom bent leads'
>to make them fit... it could also be my improvisation... my kit was
>missing ... something like 4 caps, 2 diodes, a nylon screw, and like 3
>resistors... so i went to the local electronics store, got what i
>needed... everything i bought is to proper spec's... if i needed 22pf,
>i got 22pf... but yeah. i wonder if anyone else noticed this about
>some of the cap's in the kit...
>
>but im going to play with this radio tonight, de-solder the PA, and
>redo all my alignments, check the voltages onces, twice and a third
>time again... then solder it back in... and see what happens... i
>might even break out the oscilloscope again...
>
>73 de VE3SJB
>Stephan
>ve3sjb.com

---
http://liveearth.msn.com

280. Re: {Disarmed} RE: [mmr40owngrp] Re: Frustration

Yahoo group: mmr40owngrp
Date: 2007-07-05 17:57:20 UTC
From: Stephan
Topic: 280 Message: 280

Yeah, i rebent everything nicely as well.... mabey i should throw my PA transistor in the transistor checker unit.. see what it comes back with then check against the data sheet... I threw it on the power meter again this mouring, and fudged around with it and i can get the power up to about 1.75 watts... low... with also a low current reading, my bench supply has current protection in it at 600ma and it never shut down.. and the meter was reading ... i cant remember haha... but it was quite low between RX and TX.....

I woudl like to ask anyone on the forums here... if they have a nice working MMR-40, if they can take some measurements, and throw them on the web... then id like to compare... mine vs a working one... even if 2 - 3 people take the time to get soem measurements, with the PA in, and mabey with out it in, it may aid us with 'broken' MMR-40's ... and i guess, its time to use my college EE knowledge, and make this rig work..

I think half the reason it doent want to work is because i went all out last weekend and built my 40m dipole haha, we all know, antenna season is between November and the end of Febuary haha... it allways seems like antennas put up in -25 celcius weather with a 30km/h wind work better every time... haha...

But i guess until we can figure this out, ill have to stick with 20m PSK31 for now....

Stephan Burns
Radio Amateur VE3SJB
Grid: EN58ij
http://ve3sjb.com
ve3sjb@...

73 de VE3SJB SK

----- Original Message -----
From: Rob May
To: mmr40owngrp@yahoogroups.com
Sent: Thursday, July 05, 2007 1:30 PM
Subject: {Disarmed} RE: [mmr40owngrp] Re: Frustration

Yeah, a lot of the caps had the wrong lead spacing, I didn't find that much
of an issue. I just rebent the leads carefully with needlenose pliers. I
wasn't missing any parts in either kit. If all your voltage measurements
before putting in the PA transistor are fine, you should be ok. I would
really like to figure out what the problem is. I'm an electronic tech and a
very active kit builder and it beat me! Hope you have better luck.
Rob
NV5E

>From: "ve3sjb"
><ve3sjb@...>http://by111fd.bay111.hotmail.msn.com/cgi-bin/compose?type=ra&msg=D02B1937-5E6D-4FE5-9F79-9600BFF96AF3&start=0&len=21902&curmbox=00000000%2d0000%2d0000%2d0000%2d000000000001&a=5a216c243317da30e0cc76417c63622fcd792ed243c7b8a7e6b53438efac568b#

Send
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Re: Frustration
>Date: Thu, 05 Jul 2007 16:22:50 -0000
>
>Well, i wonder if this problem has anything to do with the cap's that
>came with my kit, almost all of them with the exception of the
>electrolytic caps, are too big... the 104 caps are all atleast 1.5x
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>so there are a lot of caps on the board that have 'custom bent leads'
>to make them fit... it could also be my improvisation... my kit was
>missing ... something like 4 caps, 2 diodes, a nylon screw, and like 3
>resistors... so i went to the local electronics store, got what i
>needed... everything i bought is to proper spec's... if i needed 22pf,
>i got 22pf... but yeah. i wonder if anyone else noticed this about
>some of the cap's in the kit...
>
>but im going to play with this radio tonight, de-solder the PA, and
>redo all my alignments, check the voltages onces, twice and a third
>time again... then solder it back in... and see what happens... i
>might even break out the oscilloscope again...
>
>73 de VE3SJB
>Stephan
>ve3sjb.com

_____
http://liveearth.msn.com

281. RE: [mmr40owngrp] Frustration

Yahoo group: mmr40owngrp
Date: 2007-07-05 18:10:47 UTC
From: fhump@milwpc.com
Topic: 275 Message: 281

One quick though over driving the PA can cause it to self oscillate I had mine giving me a nice 1.2 MHz signal when I keyed the mic without audio. That took some quality time with an O-scope before I realized what I was seeing and how to fix it. Something to look for
Frank
KA9FZR

---- Original Message ----
From: ve3sjb@...
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Frustration
Date: Thu, 05 Jul 2007 05:27:44 -0000

>Hello....
>
>Ok so I got the PTO up and running nice, tuned up the receiver... did
>
>the BFO alignment... then did all the steps up to putting in the
>final power transistor.. i had a nice side tone... everything was
>working 100% up untill i threw in the last power transistor...
>first... the case of the power transistor shorted to the heat sink...
>
>instructions say that it should not happen, but that was cured by
>throwing in a insulator from the junk box... so that was solved...
>but i started the first steps of the setup with the power transistor
>in, and guess what. No side tone, low RF power out 1-2W PEP, and best
>
>of all, when i put my SSB receiver becide the dummy load... the CW
>note is non existant, and its producing a whole bunch of awful
>hash...
>
>I havent looked at the power output on the oscilloscope yet but thats
>
>for tomorrow, i was going to play baseball with that radio earlier
>today... i had to walk away from it for the evening. I even went as
>far as useing just a mono phone plug with a switch on it, to key the
>rig to make sure it wasn't my pile of junk home brew cw key....
>
>any ideas would be awesome, ill check back here in the mouring, and
>post more details... mabey some pix too... if i can find my digi cam
>HI HI....
>
>73 de VE3SJB
>Stephan
>

282. 33 pf again

Yahoo group: mmr40owngrp
Date: 2007-07-05 22:30:30 UTC
From: Don DeGregori
Topic: 282 Message: 282

I received 6 33 pf caps, the same shown on parts list. The layout shows
7. Was anyone short 1 cap? I've e-mailed ki6ds@... about this
with no response.
donde

283. RE: [mmr40owngrp] 33 pf again

Yahoo group: mmr40owngrp
Date: 2007-07-05 22:38:05 UTC
From: Bob Miller
Topic: 282 Message: 283

Doug is out of town and will be gone for awhile.

Bob
wb6kwt
-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On
Behalf Of Don DeGregori
Sent: Thursday, July 05, 2007 3:31 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] 33 pf again

I received 6 33 pf caps, the same shown on parts list. The layout shows
7. Was anyone short 1 cap? I've e-mailed ki6ds@... about this
with no response.
donde

284. RE: {Disarmed} RE: [mmr40owngrp] Re: Frustration

Yahoo group: mmr40owngrp
Date: 2007-07-05 22:48:09 UTC
From: Bob Miller
Topic: 280 Message: 284

My kit was the very first one shipped. I had a couple of problems,
like putting L2 in backwards and setting the BFO level too high but once
those were
corrected I get over 5 watts out. I've made several SSB and CW contacts, all
have
been here on the west coast and one into Colorado. I wish Steve Weber would
drop
in and help with some suggestions of what to look for. I'm powering the rig
at 13.5V,
as suggested in the manual.

I really hope you can get your rig up and running properly because it's a
fun
little rig.

Bob
wb6kwt
-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On
Behalf Of Stephan
Sent: Thursday, July 05, 2007 10:57 AM
To: mmr40owngrp@yahoogroups.com
Subject: Re: {Disarmed} RE: [mmr40owngrp] Re: Frustration

Yeah, i rebent everything nicely as well.... mabey i should throw my PA
transistor in the transistor checker unit.. see what it comes back with then
check against the data sheet... I threw it on the power meter again this
mouring, and fudged around with it and i can get the power up to about 1.75
watts... low... with also a low current reading, my bench supply has current
protection in it at 600ma and it never shut down.. and the meter was reading
... i cant remember haha... but it was quite low between RX and TX.....

I woudl like to ask anyone on the forums here... if they have a nice
working MMR-40, if they can take some measurements, and throw them on the
web... then id like to compare... mine vs a working one... even if 2 - 3
people take the time to get soem measurements, with the PA in, and mabey
with out it in, it may aid us with 'broken' MMR-40's ... and i guess, its
time to use my college EE knowledge, and make this rig work..

I think half the reason it doent want to work is because i went all out
last weekend and built my 40m dipole haha, we all know, antenna season is
between November and the end of Febuary haha... it allways seems like
antennas put up in -25 celcius weather with a 30km/h wind work better every
time... haha...

But i guess until we can figure this out, ill have to stick with 20m
PSK31 for now....

Stephan Burns
Radio Amateur VE3SJB
Grid: EN58ij
http://ve3sjb.com
ve3sjb@...

73 de VE3SJB SK

----- Original Message -----
From: Rob May
To: mmr40owngrp@yahoogroups.com
Sent: Thursday, July 05, 2007 1:30 PM
Subject: {Disarmed} RE: [mmr40owngrp] Re: Frustration

Yeah, a lot of the caps had the wrong lead spacing, I didn't find that
much
of an issue. I just rebent the leads carefully with needlenose pliers.
I
wasn't missing any parts in either kit. If all your voltage
measurements
before putting in the PA transistor are fine, you should be ok. I
would
really like to figure out what the problem is. I'm an electronic tech
and a
very active kit builder and it beat me! Hope you have better luck.
Rob
NV5E

>From: "ve3sjb"
><ve3sjb@...>http://by111fd.bay111.hotmail.msn.com/cgi-bin/compos
e?type=ra&msg=D02B1937-5E6D-4FE5-9F79-9600BFF96AF3&start=0&len=21902&curmbox
=00000000%2d0000%2d0000%2d0000%2d000000000001&a=5a216c243317da30e0cc76417c63
622fcd792ed243c7b8a7e6b53438efac568b#
Send
>Reply-To: mmr40owngrp@yahoogroups.com
>To: mmr40owngrp@yahoogroups.com
>Subject: [mmr40owngrp] Re: Frustration
>Date: Thu, 05 Jul 2007 16:22:50 -0000
>
>Well, i wonder if this problem has anything to do with the cap's that
>came with my kit, almost all of them with the exception of the
>electrolytic caps, are too big... the 104 caps are all atleast 1.5x
>the spacing of the holes on the board.. they are like 0.2" not 0.1"
>so there are a lot of caps on the board that have 'custom bent leads'
>to make them fit... it could also be my improvisation... my kit was
>missing ... something like 4 caps, 2 diodes, a nylon screw, and like
3
>resistors... so i went to the local electronics store, got what i
>needed... everything i bought is to proper spec's... if i needed

22pf,
>i got 22pf... but yeah. i wonder if anyone else noticed this about
>some of the cap's in the kit...
>
>but im going to play with this radio tonight, de-solder the PA, and
>redo all my alignments, check the voltages onces, twice and a third
>time again... then solder it back in... and see what happens... i
>might even break out the oscilloscope again...
>
>73 de VE3SJB
>Stephan
>ve3sjb.com

_____
http://liveearth.msn.com

285. Re: 33 pf again

Yahoo group: mmr40owngrp
Date: 2007-07-06 01:02:10 UTC
From: Don DeGregori
Topic: 282 Message: 285

--- In mmr40owngrp@yahoogroups.com, "Bob Miller" <wb6kwt@...> wrote:
>
> Doug is out of town and will be gone for awhile.
>
> Bob
> wb6kwt

Well, what do you know? I found the 7th 33pf laying on floor!
Sorry for all the blah!!!
donde

> -----Original Message-----
> From: mmr40owngrp@yahoogroups.com
[mailto:mmr40owngrp@yahoogroups.com]On
> Behalf Of Don DeGregori
> Sent: Thursday, July 05, 2007 3:31 PM
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] 33 pf again
>
>
> I received 6 33 pf caps, the same shown on parts list. The layout
shows
> 7. Was anyone short 1 cap? I've e-mailed ki6ds@... about this
> with no response.
> donde
>

286. Reversed

Yahoo group: mmr40owngrp
Date: 2007-07-06 22:45:00 UTC
From: Don DeGregori
Topic: 286 Message: 286

The red labels on the parts layout are reversed.
Namely C61 and C24. C61 should say 102 and C24 should say 104.
donde

287. MMR-40

Yahoo group: mmr40owngrp
Date: 2007-07-07 05:29:13 UTC
From: wbdmxbaileybobbuttercup
Topic: 287 Message: 287

well today I did the final testing and adjustments with a couple of the mods that was suggested here like hot melting the L1 coil down and removing the nylon screw, also adding a 15 pf cap to help bring the tuning range where I wanted it, tweaking the spacing of L3.

I now have it working fine with 6.5 watt output at 13.8 volts.
next step is to add the AADE display and it will be all finished.
I am very happy with the way everything worked out, and for the help you guy's gave me.
thank you all very much
now to get this thing on the air and make some contacts on CW.

bob
WB7DMX

288. Re: MMR-40

Yahoo group: mmr40owngrp
Date: 2007-07-08 19:28:56 UTC
From: ron_ayling
Topic: 287 Message: 288

Just out of interest Bob can you confirm that the PA in your working kit was an IRF510A as in the parts list, or is it IRF530A as in the circuit
thanks from Ron g3yuh

--- In mmr40owngrp@yahoogroups.com, "wbdmxbaileybobbuttercup" <wb7dmx@...> wrote:
>
> well today I did the final testing and adjustments with a couple of the
> mods that was suggested here like hot melting the L1 coil down and
> removing the nylon screw, also adding a 15 pf cap to help bring the
> tuning range where I wanted it, tweaking the spacing of L3.
>
> I now have it working fine with 6.5 watt output at 13.8 volts.
> next step is to add the AADE display and it will be all finished.
> I am very happy with the way everything worked out, and for the help
> you guy's gave me.
> thank you all very much
> now to get this thing on the air and make some contacts on CW.
>
> bob
> WB7DMX
>

289. Re: [mmr40owngrp] Re: MMR-40

Yahoo group: mmr40owngrp
Date: 2007-07-08 19:58:44 UTC
From: Steven Weber
Topic: 287 Message: 289

> Just out of interest Bob can you confirm that the PA in your working
> kit was an IRF510A as in the parts list, or is it IRF530A as in the
> circuit
> thanks from Ron g3yuh
>

It doesn't matter, I used both during the development of the rig and both
worked the same. The 530A just has a higher Vds votage rating.

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

290. Re: MMR-40

Yahoo group: mmr40owngrp
Date: 2007-07-08 20:44:29 UTC
From: wbdmxbaileybobbuttercup
Topic: 287 Message: 290

--- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@...>
wrote:
>
>
> Just out of interest Bob can you confirm that the PA in your
working
> kit was an IRF510A as in the parts list, or is it IRF530A as in
the
> circuit
> thanks from Ron g3yuh
>
> --- In mmr40owngrp@yahoogroups.com, "wbdmxbaileybobbuttercup"
> <wb7dmx@> wrote:
> >
> > well today I did the final testing and adjustments with a couple
of
> the
> > mods that was suggested here like hot melting the L1 coil down
and
> > removing the nylon screw, also adding a 15 pf cap to help bring
the
> > tuning range where I wanted it, tweaking the spacing of L3.
> >
> > I now have it working fine with 6.5 watt output at 13.8 volts.
> > next step is to add the AADE display and it will be all finished.
> > I am very happy with the way everything worked out, and for the
> help
> > you guy's gave me.
> > thank you all very much
> > now to get this thing on the air and make some contacts on CW.
> >
> > bob
> > WB7DMX
> >
>
just to confirm it, mine is the IRF510A

bob
WB7DMX

291. Re: MMR-40

Yahoo group: mmr40owngrp
Date: 2007-07-08 22:09:20 UTC
From: ron_ayling
Topic: 287 Message: 291

Hi Steve
Any ideas as to why some of these kits seem to be suffering from
distorted speech combined with low power?
from Ron...

--- In mmr40owngrp@yahoogroups.com, Steven Weber <kd1jv@...> wrote:
>
> > Just out of interest Bob can you confirm that the PA in your
working
> > kit was an IRF510A as in the parts list, or is it IRF530A as in
the
> > circuit
> > thanks from Ron g3yuh
> >
>
> It doesn't matter, I used both during the development of the rig
and both
> worked the same. The 530A just has a higher Vds votage rating.
>
>
> 72,
> Steve, KD1JV
> "Melt Solder"
> White Mountains of New Hampshire
> http://kd1jv.qrpradio.com
>

292. low power output problems

Yahoo group: mmr40owngrp
Date: 2007-07-09 17:30:16 UTC
From: Steven Weber
Topic: 287 Message: 292

For those of you suffering from low power output of the MMR40:

There could be a number of reasons:

If gate drive voltage was good during the preliminary tune up but both transmit current and power output is low, then you most likely have to adjust the wire spacing on the low pass filter coils, with L3 having the most effect. The optimum spacing of the wire on the LPF cores is somewhat dependent on the operating frequency, so should be done at the high end of the CW segement or the low end of the SSB segment to keep the power output fairly consistant over the tuning range of the rig.

If the transmit power supply current is in the range it should be for 6-7 watts out (about 900 ma) and the above adjustment of the LPF wire spacing doesn't have much or any effect, check Q2 to see if the drain-source is shorted or at a low resistance. If Q2 is getting hot during transmit, this would also be an indication it is bad.

Other possible casues of low power output is having an extra turn on the LPF toriods (farily common mistake), the bifiller wound toroids not installed properly or some other missplaced component.

If one or two people with low power output problems want to send thier rig to me to look and and find out why its not working properly, I would be happy to do that, asking only for return postage.
72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

293. Re: Low power output problems - Progress!

Yahoo group: mmr40owngrp
Date: 2007-07-10 02:35:31 UTC
From: sigcom1
Topic: 287 Message: 293

Before throwing in the towel and shipping Tom's radio off to Steve, I decided to take another crack at it. Available bench time for hobby stuff has been a premium for the past several weeks but this afternoon it was quiet and I could concentrate for an hour or so.

Alignment 'by the book' had resulted in wholly unsatisfactory transmitter operation. At no time did the receiver show any signs of problems; after aligment it received very well. Let me preface the following by saying that after repairing the initial PTO problem I then followed the alignment instructions to the letter.

Symptoms:

Low power output, a maximum of approx. .5 Watts (it may have been as high as 1 Watt at one time but I can't remember for certain) even with the tone level control cranked to full-clockwise (max. tone equalled max. p/out).

Current consuption was 200 mA @ 13.8 VDC input. This was about 1.5 Watts PA input for a half Watt output, not too good.

The CW carrier as displayed on the spectrum analyser (S/A) was ugly. It appeared that there was insufficient carrier null even though it had nulled down just fine during alignment (before inserting the PA FET).

SSB audio as monitored on both the service monitor and an SSB receiver was unitelligible.

Something I found very odd was that while cranking down the tone level, the relatively strong carrier displayed on the S/A would suddenly disappear even though there was power output still showing on the wattmeter.

Here's what I did:

Cranked the tone level down until the transmitter was putting out just measurable p/out (before dropping out of the S/A display).

Adusted the BFO frequency until the spectral display looked cleanest.

Cranked up the tone level slowly until the increase in p/out started to flatten.

Squeezed/spread the turns on the toroids in the output network to increase p/out.

Re-tweaked the BFO for best looking display (CW).

Listened to the SSB audio on the service monitor; it was then acceptable.

Power output was then 4 Watts. PA current consumption was about 410 mA for a PA efficiency of about 70 percent. This seems about 15 percent too good to me so I need to check the 2nd and 3rd harmonics and re-tweak the output network.

The same adjustments could most likely be made using an oscilloscope of the proper bandwidth connected to the radio output port (with a dummy load attached, of course) or by using an SSB receiver with the 'scope hung on the receiver's audio output (being careful not to overload the monitor receiver's front-end).

More as things develop.

73.......Steve Smith WB6TNL

294. Re: low power output problems

Yahoo group: mmr40owngrp
Date: 2007-07-10 13:19:25 UTC
From: ron_ayling
Topic: 287 Message: 294

Hi Steve
Well that sounds a very good offer!!
Perhaps you could email me your address so that I
can post the PCB to you, and perhaps give some idea
of a return shipping cost that I can pay hopefully
by PayPal as thats easiest from the UK.

I have checked very carefully for goofs in the construction.
and got someone else to check as well, I have ordered another
Output device as I can't seem to get this one to go above 1.5amp
even with the bias turned right up to 5v let alone blow a 2a fuse.
The connections seem correct on the device, although I did have to
fit an insulator as it shorted to the heat sink initially, moving
turns about on the rings seem to have very little effect all being
very flat. the tone pot has to be turned very low to see a clean
signal into the output device, as with all the others the receiver
works very well,
from Ron g3yuh...

--- In mmr40owngrp@yahoogroups.com, Steven Weber <kd1jv@...> wrote:
>
> For those of you suffering from low power output of the MMR40:
>
> There could be a number of reasons:
>
> If gate drive voltage was good during the preliminary tune up but
both
> transmit current and power output is low, then you most likely have
to
> adjust the wire spacing on the low pass filter coils, with L3
having the
> most effect. The optimum spacing of the wire on the LPF cores is
somewhat
> dependent on the operating frequency, so should be done at the high
end of
> the CW segement or the low end of the SSB segment to keep the power
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> fairly consistant over the tuning range of the rig.
>
> If the transmit power supply current is in the range it should be
for 6-7
> watts out (about 900 ma) and the above adjustment of the LPF wire
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source is

> shorted or at a low resistance. If Q2 is getting hot during
transmit, this
> would also be an indication it is bad.
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> LPF toriods (farily common mistake), the bifiller wound toroids not
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>
> If one or two people with low power output problems want to send
thier rig
> to me to look and and find out why its not working properly, I
would be
> happy to do that, asking only for return postage.
> 72,
> Steve, KD1JV
> "Melt Solder"
> White Mountains of New Hampshire
> http://kd1jv.qrpradio.com
>

295. Re: [mmr40owngrp] Re: low power output problems

Yahoo group: mmr40owngrp
Date: 2007-07-10 18:56:02 UTC
From: Steven Weber
Topic: 287 Message: 295

> Well that sounds a very good offer!!
> Perhaps you could email me your address so that I
> can post the PCB to you, and perhaps give some idea
> of a return shipping cost that I can pay hopefully
> by PayPal as thats easiest from the UK.
>

My address is

Steven Weber
633 Champlain St
Berlin, NH 03570

I can let you know what it costs to send back when I do. I imagine it woudl be in the $6-7 dollar range. If you only send the board, less speaker and cabinet, that would reduce the weight and postage considerably.

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

296. Proper L2 winding

Yahoo group: mmr40owngrp
Date: 2007-07-11 16:30:57 UTC
From: Steven Weber
Topic: 287 Message: 296

Ahhh, I now see why some people get the main and feedback winding of L2 reversed or connect the feedback winding with the wrong polatrity so the oscillator doesn't start.

It depends on how you wind the the toriods.

When I wind a toriod, I always start by passing the starting end of the wire through the front of the core and wind by looping the long end of the wire through the back. If the core is wound this way, everything works out as it should.

However, it seems some of you wind the other way around. You start by passing the start of the wire in from the back of the core and wind by passing the rest of the wire in from the front. If wound this way, the main and feedback connections are revesed and the coil needs to be mounted at right angles to the PTO coil for the board connections to be correct. If the coil is mounted as shown on the board outline, parallel to the the PTO coil, the feedback winding becomes the main winding. If you notice that the main winding is going into the feeback winding holes, you revese the direction of the feedback winding to make the wires line up with the holes and the oscillator doesn't start.

I never noticed that there were two ways one can wind a toriod. It might depend if your right handed or left handed. I guess another revison to the manual is in order.
72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

297. Mic for the mmr-40

Yahoo group: mmr40owngrp
Date: 2007-07-11 17:42:16 UTC
From: K6WV
Topic: 287 Message: 297

Hi,

I've build the unit and now I'm trying to put a mic together for it. I just realized I don't really know how the PTT works. Could someone provide me a more complete idea of the mic wiring?

Thanks,

Jon K6WV

298. Re: Mic for the mmr-40

Yahoo group: mmr40owngrp
Date: 2007-07-11 22:53:10 UTC
From: sigcom1
Topic: 287 Message: 298

Jon,

Actuating the PTT sw. simply connects the mic. connector 'tip'
and 'sleeve' together. The ring and sleeve connections go to the
mic. cartridge.

Refer to diagram on pg. 2 of the instructions.

Tip: Goes to one side of the PTT switch/pushbutton.
Ring: Goes to the + (positive) side of the electret mic. cartridge.
Sleeve: Goes to the - side of the mic. and the other side of the PTT
switch/pushbutton.

That's it. Best of luck with your kit.

73.......Steve Smith WB6TNL
--- In mmr40owngrp@yahoogroups.com, K6WV <k6wv@...> wrote:
>
> Hi,
>
> I've build the unit and now I'm trying to put a mic together for
it. I
> just realized I don't really know how the PTT works. Could someone
> provide me a more complete idea of the mic wiring?
>
> Thanks,
>
> Jon K6WV
>

299. New file uploaded to mmr40owngrp

Yahoo group: mmr40owngrp
Date: 2007-07-11 23:42:41 UTC
From: mmr40owngrp@yahoogroups.com
Topic: 19 Message: 299

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the mmr40owngrp
group.

File : /MMR40 assembly manual REV B.pdf
Uploaded by : kd1jv <kd1jv@...>
Description : Rev B manual updated 7/11/07

You can access this file at the URL:
http://groups.yahoo.com/group/mmr40owngrp/files/MMR40%20assembly%20manual%20REV%20B.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/help/us/groups/files

Regards,

kd1jv <kd1jv@...>

300. MMR40 rev B manual

Yahoo group: mmr40owngrp
Date: 2007-07-11 23:45:33 UTC
From: kd1jv
Topic: 300 Message: 300

Just up loaded a revised manual with better info and drawings on how to wind the L2 coil. Also fixed the assembly drawing and schematic to eliminate discrepencies. If you have not built your kit yet, I would suggest downlaoding this latest manual.

Steve KD1JV

301. Info required

Yahoo group: mmr40owngrp
Date: 2007-07-20 12:06:01 UTC
From: Jim
Topic: 301 Message: 301

Can someone tell me the pysical size of the PCB?
Jim VE3DDY

302. Re: [mmr40owngrp] Info required

Yahoo group: mmr40owngrp
Date: 2007-07-20 12:54:35 UTC
From: CONNIE NICHOLSON
Topic: 301 Message: 302

JIM--- 4 X 4 3/4 INCHES----CARL

Jim <bambazonke@...> wrote: Can someone tell me the pysical size of the PCB?
Jim VE3DDY

303. digital display

Yahoo group: mmr40owngrp
Date: 2007-07-20 13:21:08 UTC
From: wbdmxbaileybobbuttercup
Topic: 303 Message: 303

what circuit is the digital display in the picture of the home page.
I would like to build one for my rig.
thanks
bob
WB7DMX

304. RE: [mmr40owngrp] digital display

Yahoo group: mmr40owngrp
Date: 2007-07-20 13:58:47 UTC
From: Bob Miller
Topic: 303 Message: 304

Bob,

That was a kit sold by Steve Weber, not sure it is still offered but check
his web page.

http://kd1jv.qrpradio.com/

Bob
wb6kwt
-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On
Behalf Of wbdmxbaileybobbuttercup
Sent: Friday, July 20, 2007 6:21 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] digital display

what circuit is the digital display in the picture of the home page.
I would like to build one for my rig.
thanks
bob
WB7DMX

305. Re: digital display

Yahoo group: mmr40owngrp
Date: 2007-07-21 10:14:38 UTC
From: Bruce Beford
Topic: 303 Message: 305

--- In mmr40owngrp@yahoogroups.com, "Bob Miller" <wb6kwt@...> wrote:
>
> Bob,
>
> That was a kit sold by Steve Weber, not sure it is still offered
but check
> his web page.
>
> http://kd1jv.qrpradio.com/
>
> Bob
> wb6kwt
> -----Original Message-----
> From: mmr40owngrp@yahoogroups.com
[mailto:mmr40owngrp@yahoogroups.com]On
> Behalf Of wbdmxbaileybobbuttercup
> Sent: Friday, July 20, 2007 6:21 AM
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] digital display
>
>
> what circuit is the digital display in the picture of the home
page.
> I would like to build one for my rig.
> thanks
> bob
> WB7DMX
>

I spoke with Steve Weber at Lobstercon about the Digital Display kit. It is not available right now. He does have a number of PC boards left, and may offer another limited run sometime in the future. Right not, a lot of his 'free time' is being used to bring the ATS-3B to production.

-Bruce N1RX

306. Re: digital display

Yahoo group: mmr40owngrp
Date: 2007-07-22 07:07:37 UTC
From: ron_ayling
Topic: 303 Message: 306

The LCD display from Norcal QRP club is excellent and works well with the MMR-40 provided you set the correct offsets, also they now do a DDS VFO add on to it which I'm sure would replace the MMR-40 VFO and give lots of extra goodies (though I've not tried that) all for $50 from Ron...

--- In mmr40owngrp@yahoogroups.com, "Bruce Beford" <bruce.beford@...> wrote:
>
> --- In mmr40owngrp@yahoogroups.com, "Bob Miller" <wb6kwt@> wrote:
> >
> > Bob,
> >
> > That was a kit sold by Steve Weber, not sure it is still offered
> but check
> > his web page.
> >
> > http://kd1jv.qrpradio.com/
> >
> > Bob
> > wb6kwt
> > -----Original Message-----
> > From: mmr40owngrp@yahoogroups.com
> [mailto:mmr40owngrp@yahoogroups.com]On
> > Behalf Of wbdmxbaileybobbuttercup
> > Sent: Friday, July 20, 2007 6:21 AM
> > To: mmr40owngrp@yahoogroups.com
> > Subject: [mmr40owngrp] digital display
> >
> >
> > what circuit is the digital display in the picture of the home
> page.
> > I would like to build one for my rig.
> > thanks
> > bob
> > WB7DMX
> >
>
> I spoke with Steve Weber at Lobstercon about the Digital Display
kit.
> It is not available right now. He does have a number of PC boards
> left, and may offer another limited run sometime in the future.
Right
> not, a lot of his 'free time' is being used to bring the ATS-3B to
> production.

>
> -Bruce N1RX
>

307. RE: [mmr40owngrp] Re: digital display

Yahoo group: mmr40owngrp
Date: 2007-07-22 12:45:08 UTC
From: Bob Miller
Topic: 303 Message: 307

I'm using the NorCal FCC1/2 pair and they work very well with the MMR-40.

Bob
wb6kwt
-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On
Behalf Of ron_ayling
Sent: Sunday, July 22, 2007 12:08 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: digital display

The LCD display from Norcal QRP club is excellent and works well with
the MMR-40 provided you set the correct offsets, also they now do a
DDS VFO add on to it which I'm sure would replace the MMR-40 VFO and
give lots of extra goodies (though I've not tried that) all for $50
from Ron...

--- In mmr40owngrp@yahoogroups.com, "Bruce Beford" <bruce.beford@...>
wrote:
>
> --- In mmr40owngrp@yahoogroups.com, "Bob Miller" <wb6kwt@> wrote:
> >
> > Bob,
> >
> > That was a kit sold by Steve Weber, not sure it is still offered
> but check
> > his web page.
> >
> > http://kd1jv.qrpradio.com/
> >
> > Bob
> > wb6kwt
> > -----Original Message-----
> > From: mmr40owngrp@yahoogroups.com
> [mailto:mmr40owngrp@yahoogroups.com]On
> > Behalf Of wbdmxbaileybobbuttercup
> > Sent: Friday, July 20, 2007 6:21 AM
> > To: mmr40owngrp@yahoogroups.com
> > Subject: [mmr40owngrp] digital display
> >
> >
> > what circuit is the digital display in the picture of the home
> page.
> > I would like to build one for my rig.
> > thanks
> > bob

> > WB7DMX
> >
>
> I spoke with Steve Weber at Lobstercon about the Digital Display
kit.
> It is not available right now. He does have a number of PC boards
> left, and may offer another limited run sometime in the future.
Right
> not, a lot of his 'free time' is being used to bring the ATS-3B to
> production.
>
> -Bruce N1RX
>

308. RE: [mmr40owngrp] digital display

Yahoo group: mmr40owngrp
Date: 2007-07-22 17:36:41 UTC
From: Steven Weber
Topic: 303 Message: 308

This is far from being ready, but I plan on offering a digital display and keyer board for the MMR-40, eventually.
It will mount to the front panel, in the little space between the top of the controls and the top cover.

Since there is no room for a real numerical display, I've come up with something of a compromise. Somewhat crud, but effective. The display will simply be a row of six LEDs, arranged as a group of 2 and a group of 4. These will indicate the 100 kHz and 10 kHz digits, in BCD code. This is just enough information to tell you about where in the band you are, since we generally don't care exactly where we are.

Using this BCD indication scheme left just enough processor I/O pins left over to include a keyer, so I did.

309. MMR-40

Yahoo group: mmr40owngrp
Date: 2007-07-24 05:30:32 UTC
From: Robert Conley
Topic: 287 Message: 309

I have now read EVERY message (308 of them)posted and looked at EVERY picture uploaded in everyone's album. I've even read the PDF downloaded manual twice. With the exception of a couple of builders no one has had any serious problem with the MMR-40. I would like to find out what that problem was. The MMR-40 seems to lend itself to easy mods and is a pleasure to operate even at 5w SSB levels on 40M. My main concern is lack of test equipmemt on my part. Other than a DMM, RF probe & a QRP Dummy Load I have none. I wonder if that is enough to build and align a MMR-40
72/71 de RC kc5wa

310. RE: [mmr40owngrp] MMR-40

Yahoo group: mmr40owngrp
Date: 2007-07-24 12:27:12 UTC
From: fhump@milwpc.com
Topic: 287 Message: 310

>The only piece of test equipment I would add would be a freq counter
to ensure that you pto is were you want it. Of course if you make
mistakes like I am prone to a good magnifing glass, o-scope etc all
help you find your mistakes :)
Frank
KA9FZR
>
>
>---- Original Message ----
>From: kc5wa@yahoo.com
>To: mmr40owngrp@yahoogroups.com
>Subject: RE: [mmr40owngrp] MMR-40
>Date: Tue, 24 Jul 2007 05:30:32 -0000
>
>>I have now read EVERY message (308 of them)posted and looked at
>EVERY
>>picture uploaded in everyone's album. I've even read the PDF
>>downloaded manual twice. With the exception of a couple of builders
>no
>>one has had any serious problem with the MMR-40. I would like to
>find
>>out what that problem was. The MMR-40 seems to lend itself to easy
>>mods and is a pleasure to operate even at 5w SSB levels on 40M. My
>>main concern is lack of test equipmemt on my part. Other than a DMM,
>>RF probe & a QRP Dummy Load I have none. I wonder if that is enough
>to
>>build and align a MMR-40
>>72/71 de RC kc5wa
>>
>>

311. Re: [mmr40owngrp] MMR-40

Yahoo group: mmr40owngrp
Date: 2007-07-24 16:20:35 UTC
From: Lee Mairs (SAG)
Topic: 287 Message: 311

My main problem was with the phenolic tuning piece. I used the thicker wire and couldn't get the requisite number of turns on it.
FTFM-squared! Especially important regarding the tuning coil and the little switch behind it.
73 de Lee
KM4YY/2

Robert Conley wrote:
> I have now read EVERY message (308 of them)posted and looked at EVERY
> picture uploaded in everyone's album. I've even read the PDF
> downloaded manual twice. With the exception of a couple of builders no
> one has had any serious problem with the MMR-40. I would like to find
> out what that problem was. The MMR-40 seems to lend itself to easy
> mods and is a pleasure to operate even at 5w SSB levels on 40M. My
> main concern is lack of test equipmemt on my part. Other than a DMM,
> RF probe & a QRP Dummy Load I have none. I wonder if that is enough to
> build and align a MMR-40
> 72/71 de RC kc5wa
>
>
>
>
> Yahoo! Groups Links
>
>
>
>
>

312. T4 /T5 clarify

Yahoo group: mmr40owngrp
Date: 2007-07-24 17:22:22 UTC
From: Don DeGregori
Topic: 312 Message: 312

On page 11, the words "lightly twist it together" for T4 and T5, how many twists over the full length of the looped 8" wire? It may not make much difference. but would like to know this, on a successful operating radio.
Thanks, Don

313. Re: T4 /T5 clarify

Yahoo group: mmr40owngrp
Date: 2007-07-24 17:57:10 UTC
From: wbdmxbaileybobbuttercup
Topic: 312 Message: 313

--- In mmr40owngrp@yahoogroups.com, "Don DeGregori" <don1mh@...> wrote:
>
> On page 11, the words "lightly twist it together" for T4 and T5, how
> many twists over the full length of the looped 8" wire? It may not
make
> much difference. but would like to know this, on a successful
operating
> radio.
> Thanks, Don
>
the only pourpose of the twist is to help keep the wires together while
winding.
any number of twist will work fine, I used abt 15 for the entire length.

bob
WB7DMX

314. Re: T4 /T5 clarify

Yahoo group: mmr40owngrp
Date: 2007-07-26 00:43:36 UTC
From: Don DeGregori
Topic: 312 Message: 314

--- In mmr40owngrp@yahoogroups.com, "wbdmxbaileybobbuttercup"
<wb7dmx@...> wrote:
>
> --- In mmr40owngrp@yahoogroups.com, "Don DeGregori" <don1mh@> wrote:
> >
> > On page 11, the words "lightly twist it together" for T4 and T5,
how
> > many twists over the full length of the looped 8" wire? It may
not
> make
> > much difference. but would like to know this, on a successful
> operating
> > radio.
> > Thanks, Don
> >
> the only pourpose of the twist is to help keep the wires together
while
> winding.
> any number of twist will work fine, I used abt 15 for the entire
length.
>
> bob
> WB7DMX
>

Thanks Bob
After thinking what I asked, it was kind of a dumb question.
Don

315. Another one lives! (long)

Yahoo group: mmr40owngrp
Date: 2007-07-26 12:51:14 UTC
From: Bruce Beford
Topic: 315 Message: 315

Hi gang.

I just completed the (electrical) assembly of my MMR-40. It has been sitting in the box since it was pre-ordered from the first production run. Too many projects, too little time.

It went together very well, with only one issue along the way. Try as I might, I could not get 39 turns on L1. (Yes, I used the right wire size). The most I could get between the holes was 35. The manual stated that the holes that were pre-drilled in the nylon spacer (L1 coil form) should be at different distances from each end. (i.e. one should be closer to one end than the other.) I checked the form several times, and the holes both seemed to be exactly 9/32" from each end of the spacer. perhaps the first production run was a little different...

In any event, when I fired up the rig and checked the minimum VFO freq, I was too high, by about 120 KHz. Ideal for this freq would be just a bit below 3 MHz. I double checked L2, and it was installed correctly. Also, no amount of adjusting the spacing of the windings was going to move the VFO the distance I needed.

It looked like my problem was too few turns on L1. (which I expected) Since I knew that I was not going to be able to get any more on the form, I took another approach. C8 (330 pF) is the main frequency determining capacitor in the VFO. Since my freqency was too high, I decided to try adding some additional capacitance to C8. I soldered a 33 pF NP0 capacitor across the pads for C8, on the bottom of the board, and rechecked the VFO freq. I was now too low, by about the same amount as I was too high before. I was on the right track, I had just added too much capacitance. I removed my added capacitor (call it C8a), and replaced it with a 15 pF NP0. Bingo. I was able to tweak the turns spacing on L2 to get the VFO max freqency to a few Hz below 3 MHz. Checking the VFO ranges given in the manual yielded the expected results at this point.

Once the radio was tuned up and mounted on the lower case panel, I checked the two tuning ranges with two different frequency counters, and confirmed the results on-air (into a dummy load), using another receiver. The low range tunes from about 7.005 to 7.132, and the high range tunes from about 7.131 to 7.257 MHz. I am very happy with this result. Max power out was measured at 6.5 Watts CW (at 13.8V), with only a watt or so of drop-off near the ends of the tuning range. I have not yet tried transmitting on SSB, need to decide on a mic first.

I am also deciding on a freq readout. I just built a nice breadboard of KA3J's Unicounter from Dec 2000 QST. This is a single digit LED readout that uses very little front panel space. I may be able to squeeze it into the supplied Pac-Tec enclosure, or I may go with a different case. If you don't have that issue of QST, then do a web search on KA3J Unicounter- you will find some pages that describe it.

As I get my packaging decisions made, I'll post some pics. I'll also post some pics of the Unicounter I built. I used a combination of thru-hole and surface-mount parts to make a nice compact result. Others may be interested in this nifty little counter circuit.

72/73 for now,
Bruce N1RX

316. Re: Another one lives! (long)

Yahoo group: mmr40owngrp
Date: 2007-07-26 16:40:15 UTC
From: Robert Conley
Topic: 315 Message: 316

GM Bruce
Thanks for the enlighten approach to solving your VFO difficulties. It was probably easier then reworking the coil <g>. I would be intrested in your contacts with it. I am also looking forward to your pictures of your MMR-40 and the single digit digital display. Have you considered a three digit display.
RC kc5wa
--- In mmr40owngrp@yahoogroups.com, "Bruce Beford" <bruce.beford@...> wrote:
>
> Hi gang.
>
> I just completed the (electrical) assembly of my MMR-40. It has been
> sitting in the box since it was pre-ordered from the first production run. Too many projects, too little time.
>

> I am also deciding on a freq readout. I just built a nice breadboard
> of KA3J's Unicounter from Dec 2000 QST. This is a single digit LED
> readout that uses very little front panel space. I may be able to
> squeeze it into the supplied Pac-Tec enclosure, or I may go with a
> different case. If you don't have that issue of QST, then do a web
> search on KA3J Unicounter- you will find some pages that describe it.
>
> 72/73 for now,
> Bruce N1RX
>

317. First Contact, and the Unicounter display

Yahoo group: mmr40owngrp
Date: 2007-07-27 00:28:37 UTC
From: Bruce Beford
Topic: 315 Message: 317

--- In mmr40owngrp@yahoogroups.com, "Robert Conley" <kc5wa@...> wrote:
>
> GM Bruce
> Thanks for the enlighten approach to solving your VFO difficulties.

>snip<

> I am also looking forward to your pictures
> of your MMR-40 and the single digit digital display. Have you
> considered a three digit display.
> RC kc5wa

Hi Rob. Thanks for the note. Made my first contact with the MMR-40 this evening with W3BUG in MD. Straight Key CW, I was at about 6 watts, he was running 10 from his Knwd 570D. Good contact for about 20 minutes, then the QSB got deep.

As for the Unicounter frequency display, I have built and used many different types of readouts on my rigs. I enjoy making each rig I build a bit different than the last. I have used LCD, 4 digit LED and audible Morse readout before. I also built one 20M rig with a simulated 'slide rule' tuning dial that used three 10-segment LED bargraph displays to indicate the position in the band.

I came across the Unicounter circuit some time ago, and thought this would be a good time to give it a try. Though there is only one digit for the display, it can actually show the full frequency, down to 10 Hz resolution. The LED shows each digit successively. It has several programmable profile memories, where you set how many digits to display, how long to show each digit, and whether the display cycles continuously, or only when you push the button. You can also program up to 10 different offest frequencies and IF configurations.

So, you could set it to display the full freq, or just the KHz digits, or whatever your preference may be. If you program it to only display the freq when you press the button, then the circuit only draws about 2 mA when not displaying. Very battery-friendly. When the display is on, average consumption is about 14 mA. And since it only has one 7-segment display, and a pushbutton, it can fit almost anywhere. The breadboard I built it on is just about the size of a 9-volt battery. I'll get some pics up, probably tomorrow.

73 de Bruce N1RX

318. Re: Another one lives! (long)

Yahoo group: mmr40owngrp
Date: 2007-07-27 14:19:05 UTC
From: qrpjl1kra
Topic: 315 Message: 318

Hi, Bruce

Good to hear about your MMR-40 working.
Though this is very interesting QRP rig,
number of MMR-40 even in this list is not
increasing as I thought.
May be the others are busy to on the air.

As I wrote, difficulty to install frequency counter into
mmr40 is no pick up capacitor to the PTO readout point.
Careless DC from counterside, I had to replace a
NE612 to new one.

In addition, 10MHz IF is not good for frequency counter.
if the 10MHz is master crystal of the counter.
It will interefere the IF frequency.

Junichi JL1KRA

> I am also deciding on a freq readout. I just built a nice
breadboard
> of KA3J's Unicounter from Dec 2000 QST. This is a single digit LED
> readout that uses very little front panel space. I may be able to
> squeeze it into the supplied Pac-Tec enclosure, or I may go with a
> different case. If you don't have that issue of QST, then do a web
> search on KA3J Unicounter- you will find some pages that describe

319. Re: Another one lives! (long)

Yahoo group: mmr40owngrp
Date: 2007-07-27 14:39:59 UTC
From: Bruce Beford
Topic: 315 Message: 319

--- In mmr40owngrp@yahoogroups.com, "qrpjl1kra" <mx6s@...> wrote:
>
> Hi, Bruce
>
>> In addition, 10MHz IF is not good for frequency counter.
> if the 10MHz is master crystal of the counter.
> It will interefere the IF frequency.
>
> Junichi JL1KRA
>
>

Good to hear from you, Juni-san.

The frequency readout I am using (Unicounter) has a 4.096 MHz clock, to avoid interference. Good Luck with your MMR-40!

73,
Bruce N1RX

320. Average build time.

Yahoo group: mmr40owngrp
Date: 2007-08-03 13:50:03 UTC
From: oceansblue_biz
Topic: 315 Message: 320

I have decided to build a MMR-40. It really does look like an
interesting kit. Just wondering how many hours are required to build
on average. It's a great price for a SSB/CW rig. I normally only
use 40 meters anyway; both cw and ssb.

Also what are the audio reports people are getting from the
rig. When a good design appears I try to get the order in before
they are gone.

Just built a tenna dipper - nice little kit. At least for me, half the
fun is building is the kit.

Rob - NV7F

--- In mmr40owngrp@yahoogroups.com, "qrpjl1kra" <mx6s@...> wrote:
>
> Hi, Bruce
>
> Good to hear about your MMR-40 working.
> Though this is very interesting QRP rig,
> number of MMR-40 even in this list is not
> increasing as I thought.
> May be the others are busy to on the air.
>
> As I wrote, difficulty to install frequency counter into
> mmr40 is no pick up capacitor to the PTO readout point.
> Careless DC from counterside, I had to replace a
> NE612 to new one.
>
> In addition, 10MHz IF is not good for frequency counter.
> if the 10MHz is master crystal of the counter.
> It will interefere the IF frequency.
>
> Junichi JL1KRA
>
>
> > I am also deciding on a freq readout. I just built a nice
> breadboard
> > of KA3J's Unicounter from Dec 2000 QST. This is a single digit LED
> > readout that uses very little front panel space. I may be able to
> > squeeze it into the supplied Pac-Tec enclosure, or I may go with a
> > different case. If you don't have that issue of QST, then do a web
> > search on KA3J Unicounter- you will find some pages that describe
>

321. Re: Average build time.

Yahoo group: mmr40owngrp
Date: 2007-08-04 03:08:40 UTC
From: Garry
Topic: 315 Message: 321

Hi Rob.

Can't say I recall just how much time went into the build however it's not all that much. I easily had mine up and running in less then a week and I didn't work on it more then a couple of hours at a time. It's not a major build. What takes me the longest (most of the time) is the checking and cross checking each step of the build to avoid mistakes. In the case of the mmr-40 I had no build issues other then the misplacement of one capacitor that I discovered to be incorrect prior to completing the build.

Sorry but I can't volunteer much regarding the audio. I have not made any contacts on ssb short of one local one for test purposes. Actually I havn't made many on cw either as I bought a tentec off of ebay about the time I finished the mmr-40 and that radio has been seeing the greatest amount of use (all at about 10 watts cw). I called cq on feild day with the mmr-40 but made only cw contacts -- no ssb but then I mainly operated cw and not ssb other then for a few calls.

It's a fun build but since then I went on to build a couple of other items and a new hf antenna so the mmr-40 has taken a back locatioon on the bench. I did pick up a fcc1 and fcc2 (frequency display/dds) that I hope to incorporate into the mmr 40 when I get my ambition back.

Go for it. You'll enjoy it. Just heed some of the advice given here on the list and that will steer you clear of most possible faults. I did the vfo first and powered it up to test before I populated the board and I don't recall who it was that proposed that suggestion but I think it's a good one.

Have fun. I understand there will be a 20 meter one called the bitx20 (I think) comming out later this fall so after you get the mmr-40 under your belt you can opt for the Bitx kit as a next project. Can it get any better for those who enjoy kit building?

73

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "oceansblue_biz" <rlundahl@...> wrote:
>
>
> I have decided to build a MMR-40. It really does look like an
> interesting kit. Just wondering how many hours are required to build
> on average. It's a great price for a SSB/CW rig. I normally only
> use 40 meters anyway; both cw and ssb.

>
> Also what are the audio reports people are getting from the
> rig. When a good design appears I try to get the order in before
> they are gone.
>
> Just built a tenna dipper - nice little kit. At least for me, half
the
> fun is building is the kit.
>
> Rob - NV7F
>
>
>
>
>
> --- In mmr40owngrp@yahoogroups.com, "qrpjl1kra" <mx6s@> wrote:
> >
> > Hi, Bruce
> >
> > Good to hear about your MMR-40 working.
> > Though this is very interesting QRP rig,
> > number of MMR-40 even in this list is not
> > increasing as I thought.
> > May be the others are busy to on the air.
> >
> > As I wrote, difficulty to install frequency counter into
> > mmr40 is no pick up capacitor to the PTO readout point.
> > Careless DC from counterside, I had to replace a
> > NE612 to new one.
> >
> > In addition, 10MHz IF is not good for frequency counter.
> > if the 10MHz is master crystal of the counter.
> > It will interefere the IF frequency.
> >
> > Junichi JL1KRA
> >
> >
> > > I am also deciding on a freq readout. I just built a nice
> > breadboard
> > > of KA3J's Unicounter from Dec 2000 QST. This is a single digit
LED
> > > readout that uses very little front panel space. I may be able
to
> > > squeeze it into the supplied Pac-Tec enclosure, or I may go
with
a
> > > different case. If you don't have that issue of QST, then do a
web
> > > search on KA3J Unicounter- you will find some pages that describe
> >

>

322. Re: Average build time.

Yahoo group: mmr40owngrp
Date: 2007-08-04 09:56:25 UTC
From: Bruce Beford
Topic: 315 Message: 322

I belive the total build time for mine was about 7 hours. (Not counting case construction time) That's in line with what Garry figured. I also have not made any ssb contacts yet, but the received audio on ssb is fine. Receive frequency tuning for best audio can be a bit touchy, but not bad at all. This is a great kit for the price.

--- In mmr40owngrp@yahoogroups.com, "Garry" <bcgas@...> wrote:
> I understand there will be a 20 meter one called the bitx20
> (I think) comming out later this fall so after you get the mmr-40
> under your belt you can opt for the Bitx kit as a next project. >

The bitx20a is a completely different design, based on Ashhar Farhan's design. That kit is in it's third (I believe) prototype phase, so it may be a few more months before it is available. If you are interested in the bitx20, and the coming bitx20a, you can check out Farhan's Yahoo group at:

http://groups.yahoo.com/group/BITX20/

72/73,
Bruce N1RX

323. This radio is still driving me NUTS

Yahoo group: mmr40owngrp
Date: 2007-08-08 06:45:23 UTC
From: ve3sjb
Topic: 323 Message: 323

Hey everyone,

Well, after some time away from the bench because this radio was driving me NUTS i decided to spend some time trying to get it going... so i went through the alignment procedure again. Started off by removing the RF PA transistor.... and starting from square one... i touched up the BFO as per the manual, then went on to start the alignment... so, CW it works... but when i plug in my mic and talk (in to the dummy load) on a SW receiver becide me, with headphones plugged in... i can hear my voice plus a carrier, i can beat frequency it.. the audio sounds terrible.. but here is the catch.. i switch it from SSB to AM and i can make out my signal 100%... so i figured carrier is leaking through.... so i adjusted the BFO a bit, fiddled a bit... and no matter what i do, i get carrier leaking through... sounds better on AM than on SSB.... what the hell have i done haha... id throw this kit at teh wall, but it cost me a bit to much... i have even though of ordering another kit, and re-do it... im technical enough to understand the schematic... and what not... but to troubleshoot my own screwups haha.. need some help... anyone have some ideas??? anything is welcome at this point... im hopeing i can get it running so that on my upcomming trip to Ottawa and Toronto in a week, i can use it while i drive... this is where i beg, help me?

73 de VE3SJB
Stephan

324. RE: [mmr40owngrp] This radio is still driving me NUTS

Yahoo group: mmr40owngrp
Date: 2007-08-08 12:34:19 UTC
From: fhump@milwpc.com
Topic: 323 Message: 324

Stephen
Not sure if this is the same problem but on mine I was using a
o-scope on the output and found I had power going out even with no
audio. The freq of the rf was lower but the fix was to reduce the
drive to the PA seems on mine anyway it was self oscillating and the
mix of the side band and the oscillation was not good. Reducing the
drive help that problem. Haven't got an on the air check yet on mine
but it does look better on the scope.
Hope this gives you something to try
Frank
KA9FZR

---- Original Message ----
From: ve3sjb@...
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] This radio is still driving me NUTS
Date: Wed, 08 Aug 2007 06:45:23 -0000

>Hey everyone,
>
>Well, after some time away from the bench because this radio was
>driving me NUTS i decided to spend some time trying to get it
>going...
>so i went through the alignment procedure again. Started off by
>removing the RF PA transistor.... and starting from square one... i
>touched up the BFO as per the manual, then went on to start the
>alignment... so, CW it works... but when i plug in my mic and talk
>(in to the dummy load) on a SW receiver becide me, with headphones
>plugged in... i can hear my voice plus a carrier, i can beat
>frequency it.. the audio sounds terrible.. but here is the catch.. i
>switch it from SSB to AM and i can make out my signal 100%... so
>i
>figured carrier is leaking through.... so i adjusted the BFO a bit,
>fiddled a bit... and no matter what i do, i get carrier leaking
>through... sounds better on AM than on SSB.... what the hell have i
>done haha... id throw this kit at teh wall, but it cost me a bit to
>much... i have even though of ordering another kit, and re-do it...
>im technical enough to understand the schematic... and what not...
>but
>to troubleshoot my own screwups haha.. need some help... anyone have
>some ideas??? anything is welcome at this point... im hopeing i can
>get it running so that on my upcomming trip to Ottawa and Toronto in
>a
>week, i can use it while i drive... this is where i beg, help me?
>

>73 de VE3SJB
>Stephan
>

325. Re: [mmr40owngrp] This radio is still driving me NUTS

Yahoo group: mmr40owngrp
Date: 2007-08-08 16:07:10 UTC
From: Steven Weber
Topic: 323 Message: 325

Stephen,

The carrier suppresion is only about 30 dB, when everything is adjusted well. This translates to less than 1 mw of carrier being transmitted. In normal on the air operation, this amount of carrier is unlikely to be heard, as it will be well into the noise.

However, when you try to listen to yourself using a near-by reciever, that amount of carrier will be very evident, as you have noticed. Things that can make it worse is having too much PA idle current and or having the BFO frequency a little too low, allowing more carrier to pass through the crystal filter.

I suspect much of the trouble maybe simple overload of the monitor receiver. It may also be possable your power supply isn't stiff enough and the supply voltage is being modulated when you talk. I may have to do some experiments and see if I can duplicate your problem here.

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

326. Re: This radio is still driving me NUTS

Yahoo group: mmr40owngrp
Date: 2007-08-08 17:08:01 UTC
From: ve3sjb
Topic: 323 Message: 326

Well, This makes sense to me. I will explain my entire set up so far
for testing this rig.

1) the rig is mounted in the case, with the top part of the case off.
2) powersupply is around 12.72Volts... and consists of 8 AA batteries
in series, with another 8 AA batteries in parallel... so i think that
can handle the rig for now... i was useing my homebrew variable
voltage PSU, but i thought it was part of the problem for a while, so
i went to batteries.
3) antenna is a dummy load...
4) monitor RX is a Grundig YB-400PE with the antenna collapsed and the
Local/DX switch set to Local. This monitor RX is about 3ft from the
dummy load..
5) mic im useing is a modded Radio Shack hand mic i used to use for my
RadioShack HTX-202... it had the ICOM type mic/speaker connector.. but
i removed the connectors, re-wired it, and disconnected the speaker in
it for the time being. also, my other test mic is a cheap cellphone
headset... modded as well, has a switch for PTT.
6) the operator is insane as well... hihi

first time im going to try today is moving my monitor RX away a few
feet from the dummy load and use a long pair of headphones.....

I have the feeling, tonight i will be on the air at like 3am when i
get this radio all sorted out hihi...

thanks for the help,

73 de VE3SJB
Stephan

--- In mmr40owngrp@yahoogroups.com, Steven Weber <kd1jv@...> wrote:
>
> Stephen,
>
> The carrier suppresion is only about 30 dB, when everything is adjusted
> well. This translates to less than 1 mw of carrier being transmitted. In
> normal on the air operation, this amount of carrier is unlikely to be
> heard, as it will be well into the noise.
>
> However, when you try to listen to yourself using a near-by
reciever, that
> amount of carrier will be very evident, as you have noticed. Things that
> can make it worse is having too much PA idle current and or having
the BFO
> frequency a little too low, allowing more carrier to pass through the

> crystal filter.
>
> I suspect much of the trouble maybe simple overload of the monitor
> receiver. It may also be possable your power supply isn't stiff
enough and
> the supply voltage is being modulated when you talk. I may have to
do some
> experiments and see if I can duplicate your problem here.
>
>
> 72,
> Steve, KD1JV
> "Melt Solder"
> White Mountains of New Hampshire
> http://kd1jv.qrpradio.com
>

327. Re: This radio is still driving me NUTS

Yahoo group: mmr40owngrp
Date: 2007-08-08 18:48:54 UTC
From: wb8imy
Topic: 323 Message: 327

Stephan:

I ran into the same problem, but as KD1JV suggests, it turned out to be "caused" by the fact that my sensitive test receiver was easily picking up the tiny carrier signal and making it seem much louder than it really was--even while running the MMR-40 into a shielded dummy load and using only a clip lead antenna at the test receiver.

I gave up trying to utterly eliminate the carrier and I've made several SSB contacts since. No one has mentioned the presence of a carrier. In fact, audio reports have been good.

73 . . . Steve, WB8IMY

--- In mmr40owngrp@yahoogroups.com, "ve3sjb" <ve3sjb@...> wrote:
>
> Well, This makes sense to me. I will explain my entire set up so far
> for testing this rig.
>
> 1) the rig is mounted in the case, with the top part of the case
off.
> 2) powersupply is around 12.72Volts... and consists of 8 AA
batteries
> in series, with another 8 AA batteries in parallel... so i think
that
> can handle the rig for now... i was useing my homebrew variable
> voltage PSU, but i thought it was part of the problem for a while,
so
> i went to batteries.
> 3) antenna is a dummy load...
> 4) monitor RX is a Grundig YB-400PE with the antenna collapsed and
the
> Local/DX switch set to Local. This monitor RX is about 3ft from the
> dummy load..
> 5) mic im useing is a modded Radio Shack hand mic i used to use for
my
> RadioShack HTX-202... it had the ICOM type mic/speaker connector..
but
> i removed the connectors, re-wired it, and disconnected the speaker
in
> it for the time being. also, my other test mic is a cheap cellphone
> headset... modded as well, has a switch for PTT.
> 6) the operator is insane as well... hihi
>
> first time im going to try today is moving my monitor RX away a few
> feet from the dummy load and use a long pair of headphones.....

>
> I have the feeling, tonight i will be on the air at like 3am when i
> get this radio all sorted out hihi...
>
> thanks for the help,
>
> 73 de VE3SJB
> Stephan
>
> --- In mmr40owngrp@yahoogroups.com, Steven Weber <kd1jv@> wrote:
> >
> > Stephen,
> >
> > The carrier suppresion is only about 30 dB, when everything is
adjusted
> > well. This translates to less than 1 mw of carrier being
transmitted. In
> > normal on the air operation, this amount of carrier is unlikely
to be
> > heard, as it will be well into the noise.
> >
> > However, when you try to listen to yourself using a near-by
> reciever, that
> > amount of carrier will be very evident, as you have noticed.
Things that
> > can make it worse is having too much PA idle current and or having
> the BFO
> > frequency a little too low, allowing more carrier to pass through
the
> > crystal filter.
> >
> > I suspect much of the trouble maybe simple overload of the monitor
> > receiver. It may also be possable your power supply isn't stiff
> enough and
> > the supply voltage is being modulated when you talk. I may have to
> do some
> > experiments and see if I can duplicate your problem here.
> >
> >
> > 72,
> > Steve, KD1JV
> > "Melt Solder"
> > White Mountains of New Hampshire
> > http://kd1jv.qrpradio.com
> >
>

328. Re: [mmr40owngrp] Re: This radio is still driving me NUTS

Yahoo group: mmr40owngrp
Date: 2007-08-08 22:23:34 UTC
From: Steven Weber
Topic: 323 Message: 328

> 2) powersupply is around 12.72Volts... and consists of 8 AA batteries
> in series, with another 8 AA batteries in parallel... so i think that
> can handle the rig for now... i was useing my homebrew variable
> voltage PSU, but i thought it was part of the problem for a while, so

The transmitter will draw upwards of 1 A on voice peaks. Not sure if AA batteries are up to the task, even with two sets in parallel. If your HB supply is also not capable of staying regulated with 1 amp output, both of these could be a significant part of the AM modulation problem.

Radio Shack Speaker mics have a 2.2K resistor across the mic element. This will significantly reduce thier output when used with the MMR40. So, if you turn the mic gain all the way up to compensate for the low mic output of the RS speaker mic, it will be way too high if you use a different mic which does not have a resistor across the electret element.

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

329. MMR-40

Yahoo group: mmr40owngrp
Date: 2007-08-12 17:45:17 UTC
From: Robert Conley
Topic: 287 Message: 329

Well
I finally did it. I ordered a MMR-40 today from Hendricks QRP Kits.
Doug was supposed to have returned on Friday. Hopefully I'll have it
by Saturday. If he's not snowed under with orders. I'm looking forward
to the build.
RC

330. Re: MMR-40

Yahoo group: mmr40owngrp
Date: 2007-08-13 17:19:50 UTC
From: oceansblue_biz
Topic: 287 Message: 330

Please let us know how the construction progress goes.

Rob - NV7F

--- In mmr40owngrp@yahoogroups.com, "Robert Conley" <kc5wa@...> wrote:
>
> Well
> I finally did it. I ordered a MMR-40 today from Hendricks QRP Kits.
> Doug was supposed to have returned on Friday. Hopefully I'll have it
> by Saturday. If he's not snowed under with orders. I'm looking forward
> to the build.
> RC
>

331. add one more mmr-40 to the list

Yahoo group: mmr40owngrp
Date: 2007-08-16 01:55:17 UTC
From: kg4lyf
Topic: 331 Message: 331

GE all

I ordered mine yesterday and today ordered the Fcc1 from Norcal QRP

This will be my only HF rig. I want to focus on my CW and dont have the money for a comercial rig.

I have a general licence and am brushing up on my CW, I did pass the 5 WPM 4 years ago.

Now I practice at 15 to 20 and hope to make my very first CW contact with the MMR-40

Question: Should I bother with the Fcc2?

If so should I build the MMR-40 first to work them modify it or should I get the Fcc2 and use it to help align the MMR-40, Then add it to the rig?

Your thought and heads up are appreciated.

Looks like it is a fairly new rig and need some road time to get rolling.

How many have been sold so far?

Thanks

332. Re: add one more mmr-40 to the list

Yahoo group: mmr40owngrp
Date: 2007-08-16 02:53:58 UTC
From: wbdmxbaileybobbuttercup
Topic: 331 Message: 332

--- In mmr40owngrp@yahoogroups.com, "kg4lyf" <web@...> wrote:
>
> GE all
>
> I ordered mine yesterday and today ordered the Fcc1 from Norcal QRP
>
> This will be my only HF rig. I want to focus on my CW and dont
have
> the money for a comercial rig.
>
> I have a general licence and am brushing up on my CW, I did pass
the
> 5 WPM 4 years ago.
>
> Now I practice at 15 to 20 and hope to make my very first CW
contact
> with the MMR-40
>
> Question: Should I bother with the Fcc2?

hi. I also built the mmr40, it is a excellant rig.
I also built the FCC-1 and the FCC-2, together they make a very good test gear for the bench, mine is built into a hamon diecast box and I use it all the time as a freq, counter and generator, it is very accurate for this,

you could use the FCC-1 as the display for the MMR40, but then you would not be able to use it with the FCC-2 that way.

I would recommend your using the FCC-1 for the display and build another one to use with the FCC-2 as a fine piece of testing gear for the bench
I am thinking of getting another FCC-1 for my MMR40
>
> If so should I build the MMR-40 first to work them modify it or
> should I get the Fcc2 and use it to help align the MMR-40, Then
add
> it to the rig?
>
> Your thought and heads up are appreciated.
>
> Looks like it is a fairly new rig and need some road time to get
> rolling.
>
> How many have been sold so far?
>

> Thanks
>

333. Surprised

Yahoo group: mmr40owngrp
Date: 2007-08-16 20:24:45 UTC
From: Robert Conley
Topic: 333 Message: 333

Plesantly surprised. My MMR-40 arrived today. Thanks Doug

334. Re: add one more mmr-40 to the list

Yahoo group: mmr40owngrp
Date: 2007-08-16 22:23:15 UTC
From: Garry
Topic: 331 Message: 334

(Question: Should I bother with the Fcc2?)

I would say no. You have no need for the fcc2 with the mmr40 except for coverage of a small portion of the band that the as designed pto does not cover.

(If so should I build the MMR-40 first to work them modify it or should I get the Fcc2 and use it to help align the MMR-40, Then add it to the rig?)

If you have any ham band receiver with a reasonably decent frequency readout you will not need the fcc2.

(Looks like it is a fairly new rig and need some road time to get rolling.)

Just came out this spring so less than half a year old.

(How many have been sold so far?)

Sorry I can't answer that.

Garry/Ve7ajj

335. Re: add one more mmr-40 to the list

Yahoo group: mmr40owngrp
Date: 2007-08-17 01:14:08 UTC
From: kg4lyf
Topic: 331 Message: 335

(If you have any ham band receiver with a reasonably decent frequency
readout you will not need the fcc2)

I have no other ham or shortwave. The mmr-40 will be the only one.

does that change your responce?

--- In mmr40owngrp@yahoogroups.com, "Garry" <ve7ajj@...> wrote:
>
> (Question: Should I bother with the Fcc2?)
>
> I would say no. You have no need for the fcc2 with the mmr40
except
> for coverage of a small portion of the band that the as designed
pto
> does not cover.
>
>
> (If so should I build the MMR-40 first to work them modify it or
> should I get the Fcc2 and use it to help align the MMR-40, Then add
> it to the rig?)
>
> If you have any ham band receiver with a reasonably decent
frequency
> readout you will not need the fcc2.
>
>
> (Looks like it is a fairly new rig and need some road time to get
> rolling.)
>
> Just came out this spring so less than half a year old.
>
> (How many have been sold so far?)
>
> Sorry I can't answer that.
>
> Garry/Ve7ajj
>

336. New file uploaded to mmr40owngrp

Yahoo group: mmr40owngrp
Date: 2007-08-17 01:20:57 UTC
From: mmr40owngrp@yahoogroups.com
Topic: 19 Message: 336

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the mmr40owngrp
group.

File : /MMR40 assembly manual REV B.1.pdf
Uploaded by : kd1jv <kd1jv@...>
Description : latest and final(?) revison to the manual

You can access this file at the URL:
http://groups.yahoo.com/group/mmr40owngrp/files/MMR40%20assembly%20manual%20REV%20B.1.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/help/us/groups/files

Regards,

kd1jv <kd1jv@...>

337. Re: add one more mmr-40 to the list

Yahoo group: mmr40owngrp
Date: 2007-08-17 01:26:17 UTC
From: wbdmxbaileybobbuttercup
Topic: 331 Message: 337

--- In mmr40owngrp@yahoogroups.com, "kg4lyf" <web@...> wrote:
>
> (If you have any ham band receiver with a reasonably decent
frequency
> readout you will not need the fcc2)
>
> I have no other ham or shortwave. The mmr-40 will be the only one.
>
> does that change your responce?
>
>

not having a reciver would not change my response.

the FCC-1 is a frequency counter that will be used to do the
alignment of the transmitter along with what other device you chose
to measure the output of the MMR40.
you would use the FCC-1 along with the FCC-2 which would make it a
signal generator that would be used to do the alignment of the
reciver.
you would then have a fine testing unit that would be a frequency
counter and also a signail generator for testing many other things
on the work bench and expermenting.

the FCC-1 along could be used as the display for the NNR40 if you
wish, but then you would have no more use for the FCC-2 unless you
buitl another FCC-1 to go with it.

hope I was clear on this.

338. Re: add one more mmr-40 to the list

Yahoo group: mmr40owngrp
Date: 2007-08-17 11:57:52 UTC
From: kg4lyf
Topic: 331 Message: 338

yes perfectly clear. Thanks. I might just get antother FCC1/Fcc2 for
a test set as the FCC1 is destin as a dispaly for the mmr-40

--- In mmr40owngrp@yahoogroups.com, "wbdmxbaileybobbuttercup"
<wb7dmx@...> wrote:
>
> --- In mmr40owngrp@yahoogroups.com, "kg4lyf" <web@> wrote:
> >
> > (If you have any ham band receiver with a reasonably decent
> frequency
> > readout you will not need the fcc2)
> >
> > I have no other ham or shortwave. The mmr-40 will be the only one.
> >
> > does that change your responce?
> >
> >
>
> not having a reciver would not change my response.
>
> the FCC-1 is a frequency counter that will be used to do the
> alignment of the transmitter along with what other device you chose
> to measure the output of the MMR40.
> you would use the FCC-1 along with the FCC-2 which would make it a
> signal generator that would be used to do the alignment of the
> reciver.
> you would then have a fine testing unit that would be a frequency
> counter and also a signail generator for testing many other things
> on the work bench and expermenting.
>
> the FCC-1 along could be used as the display for the NNR40 if you
> wish, but then you would have no more use for the FCC-2 unless you
> buitl another FCC-1 to go with it.
>
> hope I was clear on this.
>

339. Re: add one more mmr-40 to the list

Yahoo group: mmr40owngrp
Date: 2007-08-17 15:18:43 UTC
From: Garry
Topic: 331 Message: 339

--- In mmr40owngrp@yahoogroups.com, "kg4lyf" <web@...> wrote:
>
> (If you have any ham band receiver with a reasonably decent frequency
> readout you will not need the fcc2)
>
> I have no other ham or shortwave. The mmr-40 will be the only one.
>
> does that change your responce?
>

Not really. I wonder how you will set up and calibrate the FCC2
without test equipment. Download the manual and read the section on
initial testing. Section 5.

So you're not out of the woods by buying the FCC2. You will need
some means of determining what frequency the oscillator is working at
in order to calibrate and align the MMR-40 but you will also need more
sophisticated equipment to align the FCC2 and if you already have a
scope then you don't need the FCC2 as the scope could be used to
determine the frequency of the oscillator in the MMR-40.

The next thing might be to find a local ham with a transceiver and I
am sure you will find a person willing to help you. At least most any
ham I know will.

Garry Ve7ajj

340. Troubleshooting questions - noob confused

Yahoo group: mmr40owngrp
Date: 2007-08-17 15:27:49 UTC
From: dor937
Topic: 340 Message: 340

L1 turns came out right. I had no problem adjusting to the right oscillator frequency. Receiver works just fine. After learning the "right way" to wind toroids I rewound T4 & T5. But I'm not getting voltage at Q10 gate so I set out on a witch hunt. I tried to duplicate the voltages given on page 17 with the results below.

CW MODE, 12.8V 2A POWER POCKET, KEY PLUGGED-IN, SHORT WIRE ANTENNA, RCVNG A STATION, TUNING FULL IN

values with ** are significantly different from page 17 values

PIN U3 U4 RX U4 TX U8 U5 U6 U8 RX U8 TX

1 1.37 **0.1 11.39 4.97 1.41 1.41 1.41 1.41

2 0 5 **0.01 5.01 1.41 1.41 **3.86 **3.84

3 0 0.24 0.24 5.01 0 0 1.41 1.41

4 0 0 0 0 3.86 3.83 1.41 1.41

5 6.3 0 0 5.01 3.81 3.8 1.41 1.41

6 12.71 **0.24 **0.24 5.01 4.96 4.97 0 0

7 6.45 **0.01 **0.73 5 4.59 4.34 0 0

8 1.38 12.76 12.64 12.8 5.01 5.01 0 0

4.58 **0.37

4.58 **0.37

4.58 **0.37

1.41 1.41

3.83 3.84

**3.83 1.41

1.41 **3.84

5.01 5.01

C RX B RX E RX C TX B TX E TX
Q6 5.01 3.8 3.13 5.01 3.79 3.13
Q7 0 0 0 **4.6 **1.29 **0.63
Q8 0 12.76 12.79 12.64 11.93 **0.63
Q9 12.78 0 0 12.9 2.37 **0.63

D RX G RX S RX D TX G TX S TX
Q1 0 12.74 0 0 0 0
Q2 0 12.74 0 0 0 0
Q3 0 **2.11 0 0 **0 0

At this point I have some problems: first when I probe Q3's gate I get a flutter on the DVM then the values shown; second I think I blew Q3 when I was rechecking the numbers. Must have shorted something because the tone suddenly stopped and I quit.

Questions:
1 - Should I just replace Q3 and continue?
2 - Can someone help me to localize the original problem from this data?
3 - How can U4 pins 3 and 6 have different voltage values since they're connected together?

341. Re: Troubleshooting questions - noob confused

Yahoo group: mmr40owngrp
Date: 2007-08-18 03:01:48 UTC
From: Garry
Topic: 340 Message: 341

Questions:
1 - Should I just replace Q3 and continue?
2 - Can someone help me to localize the original problem from this
data?
3 - How can U4 pins 3 and 6 have different voltage values since
they're connected together?

No 1 : I would say yes.

No. 2 Not sure I can help there.

No. 3 It would sound to me like a bad solder joint somewhere wouldn't
you think?

Garry/Ve7ajj

342. Low Power on the MMR-40

Yahoo group: mmr40owngrp
Date: 2007-08-18 12:08:09 UTC
From: ron_ayling
Topic: 342 Message: 342

Hi all, If you look back a bit you will see there were a few of us suffering from a Low Power problem with the MMR-40, Steve offered to look at my PCB and it has just returned now working at full power (Thanks Steve :))
It seems I had added one extra turn on the first Toroid in the low pass filter, I must say I had checked and counted those turns many times not only me but others as well, so it looks as if it can be quite confusing as to how the turns are counted, the best way I can say now is to look at the inside of the core of the toroid and count the turns actually resting on the inner surface, maybe a couple of really close up pictures of the coils may help, anyway I can't emphasise enough how important it is to get this part of the construction right because if it isn't spot on then its not only low power that is the result but forms of instability and unwanted mixes start to appear when attempts to get the power up by malajusting the tone level and BFO are made.
Anyway thought I'd mention it, now looking forward to some QRP operating :() from Ron g3yuh...

343. Re: Low Power on the MMR-40

Yahoo group: mmr40owngrp
Date: 2007-08-18 15:46:36 UTC
From: Bruce Beford
Topic: 342 Message: 343

Glad that Steve found your problem, Ron. This is a -very common-
mistake made when winding toroids. Don't count the turns on the
ouside of the core. Each pass -thru the center- counts as a turn.

73,
Bruce N1RX

--- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@...>
wrote:
>
> Hi all, If you look back a bit you will see there were a few of us
> suffering from a Low Power problem with the MMR-40, Steve offered
to
> look at my PCB and it has just returned now working at full power
> (Thanks Steve :))
> It seems I had added one extra turn on the first Toroid in the low
pass
> filter, I must say I had checked and counted those turns many times
not
> only me but others as well, so it looks as if it can be quite
confusing
> as to how the turns are counted, the best way I can say now is to
look
> at the inside of the core of the toroid and count the turns
actually
> resting on the inner surface, maybe a couple of really close up
> pictures of the coils may help, anyway I can't emphasise enough how
> important it is to get this part of the construction right because
if
> it isn't spot on then its not only low power that is the result but
> forms of instability and unwanted mixes start to appear when
attempts
> to get the power up by malajusting the tone level and BFO are made.
> Anyway thought I'd mention it, now looking forward to some QRP
> operating :() from Ron g3yuh...
>

344. It's building time

Yahoo group: mmr40owngrp
Date: 2007-08-18 18:03:40 UTC
From: Robert Conley
Topic: 344 Message: 344

My MMR-40 has arrived and the build has begun. If you would like to follow my progress (or lack thereof) I'm documenting it on my web site <http://www.kc5wa.us>.
RC kc5wa

345. Problem with RF voltage during transmitter test and alignment

Yahoo group: mmr40owngrp
Date: 2007-08-19 22:59:44 UTC
From: David Swain
Topic: 345 Message: 345

I'm hoping I can find help on this list for a problem I'm having with the transmitter section of my kit.

During the initial transmitter section testing and alignment (p. 13 of my manual, before the power transister and heat sink are installed) I'm having trouble with low voltage RF during the transmitter test and alignment procedures. The receiver seems to work well, but the RF voltage from the diode detector is barely measurable (.001 VDC) on my meter when the RF voltage probe is connected to the pad labeled "GATE" of Q10 and I key down. I can hear the sidetone, and the pots seem to be adjusted correctly, but I measure no change in voltage when I adjust the IF transformers T2 and T3.

Before I assembled my kit, I read the other messages from this group concerning low power problems. So I was extra careful in getting the correct number of turns on the toroids. I've built several transceiver kits so I thought I might be up to this project, but I've hit a snag.

Now here is where I have some real uncertainty. The Parts List says that there should be three "10.7 IF xformer 10 mm, brown slug" parts. I have three GREEN (or maybe aqua blue) slugs marked "42 IF 123". Is this a legitimate parts substitution or have I received parts with the wrong values for the 40-meter kit, and could this be causing the low RF voltage problem?

Thanks in advance for any help.

David AB9EI

Take the Internet to Go: Yahoo!Go puts the Internet in your pocket: mail, news, photos & more.
http://mobile.yahoo.com/go?refer=1GNXIC

346. Re: Problem with RF voltage during transmitter test and alignment

Yahoo group: mmr40owngrp
Date: 2007-08-20 02:27:32 UTC
From: kd1jv
Topic: 345 Message: 346

parts. I have three GREEN (or maybe aqua blue) slugs marked "42 IF 123". Is this a legitimate parts substitution or have I received parts with the wrong values for the 40-meter kit, and could this be causing the low RF voltage problem?

The green are a legitimate sub, as the others we originally started with are sold out and have a 6 month back order.

The problem is likely in one or both of the driver stages. Check the voltages and look for soldering errors, miss placed componets, ect.

Steve KD1JV

347. MMR-40 Build Questions

Yahoo group: mmr40owngrp
Date: 2007-08-20 00:52:38 UTC
From: Eric Mynes
Topic: 345 Message: 347

Greetings,

I know I'm fairly new so please bare with me. I've been working on an mmr-40. The only parts left on my board are 1 transistor, the diodes, and torroids. I do have a few questions I hope to get answered.

1) There are, as best I can tell, 2 different diode types. Which one goes in which locations? The manual doesn't say. Or at least, I couldn't find it

2) Does Q1 center pin bend toward the round side or the flat (like all of the other Qx transistors? The manual doesn't say like it does with the Ux transistors, but the silk screening on the board shows the center pin toward the round side of the pkg.

3) After putting the PTO coil in, how do you put S2 in? My nylon screw is in the way. Should I just cut the screw head down? Should I put S2 on leads and forget about it? Any suggestions?

Any help with these few questions that I have right now would be greatly appreciated.

Thanks and 73,
Eric

348. Re: MMR-40 Build Questions

Yahoo group: mmr40owngrp
Date: 2007-08-20 04:52:15 UTC
From: Robert Conley
Topic: 345 Message: 348

--- Eric Mynes <hamradio@...>
wrote:

> Greetings,
>
> I know I'm fairly new so please bare with me. I've
> been working on an
> mmr-40. The only parts left on my board are 1
> transistor, the diodes, and
> torroids. I do have a few questions I hope to get
> answered.
>
> 1) There are, as best I can tell, 2 different diode
> types. Which one goes
> in which locations? The manual doesn't say. Or at
> least, I couldn't find
> it
> --------------
ON page 6 of the instructions it says "the 1n5231b a
5.1 zener diode install in "D4" in the lower left
quardant

> 2) Does Q1 center pin bend toward the round side or
> the flat (like all of
> the other Qx transistors? The manual doesn't say
> like it does with the Ux
> transistors, but the silk screening on the board
> shows the center pin toward
> the round side of the pkg.
>---------
Center pin goes toward the round side. That is correct
way..

> 3) After putting the PTO coil in, how do you put S2
> in? My nylon screw is
> in the way. Should I just cut the screw head down?
> Should I put S2 on
> leads and forget about it? Any suggestions?

S2 mounts on the bottom of PCB ....See page 11 or page
page 6 second paragraph

>
> Any help with these few questions that I have right
> now would be greatly

> appreciated.
>
> Thanks and 73,
> Eric

349. Re: [mmr40owngrp] MMR-40 Build Questions

Yahoo group: mmr40owngrp
Date: 2007-08-20 04:22:32 UTC
From: bob conley
Topic: 345 Message: 349

--- Eric Mynes <hamradio@...>
wrote:

> Greetings,
>
> I know I'm fairly new so please bare with me. I've
> been working on an
> mmr-40. The only parts left on my board are 1
> transistor, the diodes, and
> torroids. I do have a few questions I hope to get
> answered.
>
> 1) There are, as best I can tell, 2 different diode
> types. Which one goes
> in which locations? The manual doesn't say. Or at
> least, I couldn't find
> it
> --------------
ON page 6 of the instructions it says "the 1n5231b a
5.1 zener diode install in "D4" in the lower left
quardant

> 2) Does Q1 center pin bend toward the round side or
> the flat (like all of
> the other Qx transistors? The manual doesn't say
> like it does with the Ux
> transistors, but the silk screening on the board
> shows the center pin toward
> the round side of the pkg.
>---------
Center pin goes toward the round side. That is correct
way..

> 3) After putting the PTO coil in, how do you put S2
> in? My nylon screw is
> in the way. Should I just cut the screw head down?
> Should I put S2 on
> leads and forget about it? Any suggestions?

S2 mounts on the bottom of PCB ....See page 11 or page
page 6 second paragraph

>
> Any help with these few questions that I have right
> now would be greatly

> appreciated.
>
> Thanks and 73,
> Eric
>

Yahoo! oneSearch: Finally, mobile search
that gives answers, not web links.
http://mobile.yahoo.com/mobileweb/onesearch?refer=1ONXIC

350. Norcal FCC1 and MMR-40

Yahoo group: mmr40owngrp
Date: 2007-08-20 12:05:49 UTC
From: ron_ayling
Topic: 350 Message: 350

Hi, I have just noticed running my FCC1 with the MMR-40 to get the frequency readout correct the offset entered into the FCC1 has to be the exact frequency the BFO xtal is running, obvious when you think about it :)in my MMR-40 this is about 2khz high, which I assume is the setting to swing the carrier onto the edge of the filter passband for SSB generation? so the offset is 10,002000 not 10,000000 as you may first think (like I did, :)
from Ron g3yuh...

351. Problem with RF voltage during transmitter test and alignment

Yahoo group: mmr40owngrp
Date: 2007-08-20 13:11:44 UTC
From: dswain100
Topic: 345 Message: 351

I'm hoping I can find help on this list for a problem I'm having with the transmitter section of my kit.

During the initial transmitter section testing and alignment (p. 13 of my manual, before the power transister and heat sink are installed) I'm having trouble with low voltage RF during the transmitter test and alignment procedures. The receiver seems to work well, but the RF voltage from the diode detector is barely measurable (.001 VDC) on my meter when the RF voltage probe is connected to the pad labeled "GATE" of Q10 and I key down. I can hear the sidetone, and the pots seem to be adjusted correctly, but I measure no change in voltage when I adjust the IF transformers T2 and T3.

Before I assembled my kit, I read the other messages from this group concerning low power problems. So I was extra careful in getting the correct number of turns on the toroids. I've built several transceiver kits so I thought I might be up to this project, but I've hit a snag.

Now here is where I have some real uncertainty. The Parts List says that there should be three "10.7 IF xformer 10 mm, brown slug" parts. I have three GREEN (or maybe aqua blue) slugs marked "42 IF 123". Is this a legitimate parts substitution or have I received parts with the wrong values for the 40-meter kit, and could this be causing the low RF voltage problem?

Thanks in advance for any help.

David AB9EI

352. Re: Problem with RF voltage during transmitter test and alignment

Yahoo group: mmr40owngrp
Date: 2007-08-21 01:27:13 UTC
From: dswain100
Topic: 345 Message: 352

Steve,

Thanks for your reply. I was concerned that I would have to replace the transformers, and I had no idea how I would be able to remove them without risking damage to the board. I will check the voltages and look for soldering errors, misplaced components, etc.

Thanks again for your quick response.
David

--- In mmr40owngrp@yahoogroups.com, "kd1jv" <kd1jv@...> wrote:
>
> parts. I have three GREEN (or maybe aqua blue) slugs marked "42 IF
> 123". Is this a legitimate parts substitution or have I received
parts
> with the wrong values for the 40-meter kit, and could this be causing
> the low RF voltage problem?
>
> The green are a legitimate sub, as the others we originally started
> with are sold out and have a 6 month back order.
>
> The problem is likely in one or both of the driver stages. Check the
> voltages and look for soldering errors, miss placed componets, ect.
>
> Steve KD1JV
>

353. MMR-40 build complete

Yahoo group: mmr40owngrp
Date: 2007-08-21 04:07:09 UTC
From: Robert Conley
Topic: 353 Message: 353

Well it's finished. First checks OK. No shorts, and I have 4.94 vdc on U1 and 5.01 volts out on U2. That is where my fun ends. I don't seem to be able to locate the oscillator signal. I've pulled 2 turns off of "L1" and no difference. mmmmmm I wonder.I wait til tomorrow
RC

354. my mmr-40

Yahoo group: mmr40owngrp
Date: 2007-08-21 13:05:09 UTC
From: Robert Conley
Topic: 354 Message: 354

Well it does hear very well. I copied "N2OZI" & "WC4F" in the phone portion and several stations on 7.040 mhz. I surprised at the audio quality. I still need to find the oscillator to position the band... I wonder if I place a Dummy load on the antenna and key the transmitter I could locate it that way? NOTE!!! Q10 and heat sink not installed
RC

355. Looking for Someone to Complete the MMR40 Project

Yahoo group: mmr40owngrp
Date: 2007-08-21 14:51:35 UTC
From: n0ok_curt
Topic: 355 Message: 355

I purchased one of the first MMR40 kits back in March and just recently completed the basic board. Now it's time to test, tune and complete the project and I'm looking for someone to complete this task for me.
Anyone willing to take on this project for compensation?

e-mail me at curt@...

356. Re: Problem with RF voltage during transmitter test and alignment

Yahoo group: mmr40owngrp
Date: 2007-08-21 15:50:52 UTC
From: dswain100
Topic: 345 Message: 356

Okay, problem solved. As ususal, it was something really silly. There were two open holes for test leads in close proximity to the "D. DET" label -- one just below it, and one just to the right. I chose the wrong one.

David AB9EI

--- In mmr40owngrp@yahoogroups.com, "dswain100" <dswain100@...> wrote:
>
> Steve,
>
> Thanks for your reply. I was concerned that I would have to replace the
> transformers, and I had no idea how I would be able to remove them
> without risking damage to the board. I will check the voltages and look
> for soldering errors, misplaced components, etc.
>
> Thanks again for your quick response.
> David
>
> --- In mmr40owngrp@yahoogroups.com, "kd1jv" <kd1jv@> wrote:
> >
> > parts. I have three GREEN (or maybe aqua blue) slugs marked "42 IF
> > 123". Is this a legitimate parts substitution or have I received
> parts
> > with the wrong values for the 40-meter kit, and could this be causing
> > the low RF voltage problem?
> >
> > The green are a legitimate sub, as the others we originally started
> > with are sold out and have a 6 month back order.
> >
> > The problem is likely in one or both of the driver stages. Check the
> > voltages and look for soldering errors, miss placed componets, ect.
> >
> > Steve KD1JV
> >
>

357. Re: Problem with RF voltage during transmitter test and alignment

Yahoo group: mmr40owngrp
Date: 2007-08-22 13:16:33 UTC
From: David Rowell
Topic: 345 Message: 357

Is the lead supposed to be in the hole right next to C75? I think I have mine wrong too!

Choose the right car based on your needs. Check out Yahoo! Autos new Car Finder tool.

358. MMR-40 HELP!...

Yahoo group: mmr40owngrp
Date: 2007-08-22 15:34:27 UTC
From: Robert Conley
Topic: 358 Message: 358

I have finished the build and it hears very well. BUT I know the PTO is not at 3.000Mhz. I have rewound the "L1" coil with a 4' (length from parts list) measured length of 32# wire(yes! it is the smaller gage) and I had again almost 10" left over from the 4' when the coil is finished. Four feet of wire will not go between the form holes, I tried several times . My general coverage RCVR does not go lower than 3.000mhz. This makes it rather difficult to calibrate (actually impossible)the PTO. Someone added a 15pf cap to the circuit to bring it in line. Where was it added?
RC

359. Re: [mmr40owngrp] Re: Problem with RF voltage during transmitter test and alignment

Yahoo group: mmr40owngrp
Date: 2007-08-22 15:45:30 UTC
From: Steven Weber
Topic: 345 Message: 359

> I think I have mine wrong too!

You could always look at the bottom of the board and see one hole goes to
the diode detector and the other to the output of the low pass filter.
Thats so if for some reason you want to hook up a meter or something to
monitor the power output, you can add a jumper between the holes.
72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

360. New file uploaded to mmr40owngrp

Yahoo group: mmr40owngrp
Date: 2007-08-22 18:10:35 UTC
From: mmr40owngrp@yahoogroups.com
Topic: 19 Message: 360

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the mmr40owngrp
group.

File : /MMR-40.pdf
Uploaded by : kc5wa <kc5wa@...>
Description : building the MMR-40

You can access this file at the URL:
http://groups.yahoo.com/group/mmr40owngrp/files/MMR-40.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/help/us/groups/files

Regards,

kc5wa <kc5wa@...>

361. Re: Problem with RF voltage during transmitter test and alignment

Yahoo group: mmr40owngrp
Date: 2007-08-22 18:41:36 UTC
From: dswain100
Topic: 345 Message: 361

David,

Sorry, but I forgot which one it was after I desoldered the test lead for final assembly. However, if one doesn't work, try the other. Steve, KD1JV, has described how to determine the correct hole by following the traces under the board. The good news is, I tried both without any apparent damage to the transceiver, which is now, by the way, fully assembled and working per specs. I'm hoping to have time to actually make some unscheduled QSO's with it this weekend.

Good luck and 73 de David AB9EI

--- In mmr40owngrp@yahoogroups.com, David Rowell <dor937@...> wrote:
>
> Is the lead supposed to be in the hole right next to C75? I think I have mine wrong too!
>
>
> ---------------------------------

362. Re: MMR-40 HELP!...

Yahoo group: mmr40owngrp
Date: 2007-08-22 21:42:10 UTC
From: Bruce Beford
Topic: 358 Message: 362

--- In mmr40owngrp@yahoogroups.com, "Robert Conley" <kc5wa@...> wrote:
>
> I have finished the build and it hears very well. BUT I know the PTO
> is not at 3.000Mhz. I have rewound the "L1" coil ...
> snip <
> Someone added a 15pf cap to the circuit to bring
> it in line. Where was it added?
> RC
>

Rob- that was me. see message #315

-Bruce N1RX

363. Re: [mmr40owngrp] Re: MMR-40 HELP!...

Yahoo group: mmr40owngrp
Date: 2007-08-22 22:07:25 UTC
From: bob conley
Topic: 358 Message: 363

Thanks Bruce
I'll let you know how it works out...
RC

--- Bruce Beford <bruce.beford@...> wrote:

> --- In mmr40owngrp@yahoogroups.com, "Robert Conley"
> <kc5wa@...> wrote:
> >
> > I have finished the build and it hears very well.
> BUT I know the PTO
> > is not at 3.000Mhz. I have rewound the "L1" coil
> ...
> > snip <
> > Someone added a 15pf cap to the circuit to bring
> > it in line. Where was it added?
> > RC
> >
>
> Rob- that was me. see message #315
>
> -Bruce N1RX
>
>

Park yourself in front of a world of choices in alternative vehicles. Visit the Yahoo! Auto Green Center.
http://autos.yahoo.com/green_center/

364. Re: MMR-40 HELP!... suggestion

Yahoo group: mmr40owngrp
Date: 2007-08-22 23:03:54 UTC
From: Bruce Beford
Topic: 358 Message: 364

--- In mmr40owngrp@yahoogroups.com, bob conley <kc5wa@...> wrote:
>
> Thanks Bruce
> I'll let you know how it works out...
> RC
>
Bob-

If you can't find the LO signal on a gen coverage RX- It sounds like you have the radio complete- (you have received signals on 40m.)

You could hook the MMR-40 to a dummy load and transmit CW dits. While transmitting, find your actual operating frequency on your separate receiver. If you think the edge limits of the PTO may be off, then try setting the PTO somewhere away from the edge- such as out 10 turns from full-in. Transmit into the dummy load, and find your signal on the receiver. Then move the PTO toward the edge (turn the PTO screw in CW, this will LOWER your operating frequency) then send some dits with your key, and find the signal on your RX. Repeat this process until you have your PTO screw all the way in. Then you will know if the lowest freq of your PTO is too low or too high.

Once you know that, you will have a better idea of how to proceesd to trim the PTO range.

GL,
Bruce N1RX

365. Re: [mmr40owngrp] Re: MMR-40 HELP!... suggestion

Yahoo group: mmr40owngrp
Date: 2007-08-22 23:30:05 UTC
From: bob conley
Topic: 358 Message: 365

Bruce
Beleive it or not I asked that same question a couple
of days ago an receive no reply... Q10 the PA has not
been installed so a minimal output will be had from Q9
the 2N4401. BTW it is complete except installing Q10
and it's heat sink
RC kc5wa
--- Bruce Beford <bruce.beford@...> wrote:

> If you can't find the LO signal on a gen coverage
> RX- It sounds like
> you have the radio complete- (you have received
> signals on 40m.)
>
> You could hook the MMR-40 to a dummy load and
> transmit CW dits. While
> transmitting, find your actual operating frequency
> on your separate
> receiver. If you think the edge limits of the PTO
> may be off, then
> try setting the PTO somewhere away from the edge-
> such as out 10
> turns from full-in. Transmit into the dummy load,
> and find your
> signal on the receiver. Then move the PTO toward the
> edge (turn the
> PTO screw in CW, this will LOWER your operating
> frequency) then send
> some dits with your key, and find the signal on your
> RX. Repeat this
> process until you have your PTO screw all the way
> in. Then you will
> know if the lowest freq of your PTO is too low or
> too high.
>
> Once you know that, you will have a better idea of
> how to proceesd to
> trim the PTO range.
>
> GL,
> Bruce N1RX
>
>

_____Ready for the edge of your seat?
Check out tonight's top picks on Yahoo! TV.
http://tv.yahoo.com/

366. Re: MMR-40 HELP!... suggestion

Yahoo group: mmr40owngrp
Date: 2007-08-23 00:34:59 UTC
From: Bruce Beford
Topic: 358 Message: 366

--- In mmr40owngrp@yahoogroups.com, bob conley <kc5wa@...> wrote:
>
> Bruce
> Beleive it or not I asked that same question a couple
> of days ago an receive no reply... Q10 the PA has not
> been installed so a minimal output will be had from Q9
> the 2N4401. BTW it is complete except installing Q10
> and it's heat sink
> RC kc5wa

Ok, then. I am assuming you have no frequency counter available, so that is why you are trying to determine the LO freq using a receiver. The "ideal" frequency range of the PTO is completely below 3 MHz. (optimum highest frequency is just below 3.0 MHz. This translates to a minimum operating frequency of just above 7.0 MHz. This rig uses an IF minus VFO = Operating frequency scheme, so the PTO Tunes backwards) So, with a receiver that only goes down to 3.0, you aren't going to have much luck finding the PTO signal.

On my radio, the PTO was running too high in frequency (probably due to having too few turns on the PTO coil) I compensated by adding capacitance to decrease the operating frequency.

If it were me, at this point I would continue with the steps following the PTO frequency measurements in the instructions. Don't worry about determining the exact fequency range yet. Since you have been able to receive both CW and SSB signals, you know that you are not all that far off.

The transmitter tuneup is done near the mid-range of the unit by setting the range switch to the high (SSB) segment of the band, and turning the PTO screw all the way in. This will be close enough for now. Once you have found your signal in the 40m band, you will be able to determine the actual range you have, and then can decide how to move it to where you want.

After you have done the RX peaking, proceed to the transmitter testing section. Follow the instructions for peaking the driver and bandpass filter. Once done with that section, you can install the final trasnsistor. Do the PA idle bias adjustment per the instructions. You can then bring the output power level up enough into your dummy load to find your 40M signal on your receiver.

This will let you determine your actual operating frequency range, and then decide how to proceed to move the PTO up or down, as needed. Once you get the PTO range finally set where you want it, you could

go back and repeak the transmitter, if needed.

GL,
Bruce N1RX

367. RF Driver and Power Amplifier Circuit Description - I'm confused even more!

Yahoo group: mmr40owngrp
Date: 2007-08-23 20:56:25 UTC
From: dor937
Topic: 367 Message: 367

Below is how I see the operation referred to the latest Manual circuit diagram. I've retyped the Manual paragraphs changing some of the component designations and adding some more to clarify my thinking. They are shown with ? in the text. Would some kind soul please read this critically and comment on its correctness?? please!!

RF Driver and Power Amplifier:

The transmit signal produced by the U6 mixer is buffered by an emitter follower, Q6, to drive the low input impedance of the T3? IF transformer used as part of the transmit band pass filter. Two IF transformers are connected "back to back" to form a double tuned circuit. IF transformers are used here instead of toroid coils and trimmer caps. The metal can of the transformer provides good shielding. It takes up less space that a separate toroid with capacitor trimmer and is easier to ensure it will peak at the desired frequency. The output of the band pass filter is taken from the secondary winding of T2? and then amplified by Q7. The signal is further amplified by the driver stage, Q9? to provide a signal large enough to drive the gate of the power amplifier, Q10?.

The PA, Q10?, is an IRF-510 power MOSFET. For linear operation it requires a bias voltage of about 3 volts. This is produced by a 5.1V zener diode, D4?, for regulation with the exact bias voltage needed being set by the V3? trimmer resistor. Bias is set so there is about 10 to 20 ma of current flowing into the PA when no drive signal is present.

The output of the PA is coupled to a Low Pass Filter (LPF) which removes harmonics and ensures proper spectral purity of the output signal. C44? connected across L4? forms a trap at the second harmonic frequency. This significantly improves the second harmonic rejection and improves PA efficiency over what is normally achieved using a 5 pole filter. The values were optimized to provide some impedance matching between the PA output impedance and the load. This also increases power output and PA efficiency.

---

368. Re: RF Driver and Power Amplifier Circuit Description - I'm confused even more!

Yahoo group: mmr40owngrp
Date: 2007-08-24 19:12:26 UTC
From: Bruce Beford
Topic: 367 Message: 368

Your editing and insertion of component designators for the
description/schematic in the rev b manual looks correct.

GL,
Bruce N1RX

--- In mmr40owngrp@yahoogroups.com, "dor937" <dor937@...> wrote:
>
> Below is how I see the operation referred to the latest Manual
circuit
> diagram. I've retyped the Manual paragraphs changing some of the
> component designations and adding some more to clarify my thinking.
> They are shown with ? in the text. Would some kind soul please read
> this critically and comment on its correctness?? please!!
>
> ---
>
> RF Driver and Power Amplifier:
>
> The transmit signal produced by the U6 mixer is buffered by an
emitter
> follower, Q6, to drive the low input impedance of the T3? IF
> transformer used as part of the transmit band pass filter. Two IF
> transformers are connected "back to back" to form a double tuned
> circuit. IF transformers are used here instead of toroid coils and
> trimmer caps. The metal can of the transformer provides good
> shielding. It takes up less space that a separate toroid with
> capacitor trimmer and is easier to ensure it will peak at the
desired
> frequency. The output of the band pass filter is taken from the
> secondary winding of T2? and then amplified by Q7. The signal is
> further amplified by the driver stage, Q9? to provide a signal large
> enough to drive the gate of the power amplifier, Q10?.
>
> The PA, Q10?, is an IRF-510 power MOSFET. For linear operation it
> requires a bias voltage of about 3 volts. This is produced by a
5.1V
> zener diode, D4?, for regulation with the exact bias voltage needed
> being set by the V3? trimmer resistor. Bias is set so there is
about
> 10 to 20 ma of current flowing into the PA when no drive signal is
> present.
>
> The output of the PA is coupled to a Low Pass Filter (LPF) which

> removes harmonics and ensures proper spectral purity of the output
> signal. C44? connected across L4? forms a trap at the second
harmonic
> frequency. This significantly improves the second harmonic
rejection
> and improves PA efficiency over what is normally achieved using a 5
> pole filter. The values were optimized to provide some impedance
> matching between the PA output impedance and the load. This also
> increases power output and PA efficiency.
>
> ---
>

369. Building MMR-40 - Any More Tips on PSK-31 Use?

Yahoo group: mmr40owngrp
Date: 2007-08-25 01:03:31 UTC
From: ab8cj
Topic: 369 Message: 369

Hi all-

I'm Doug Bowling, AB8CJ. Am building an MMR-40. At this point I have L1 wound, and after going blind trying to count turns, I measured the wire thickness with my vernier caliper (.009") and then measured the whole coil. With the turns snugged up, but not doubled, I calculate 40 turns are there so I'm happy. Am populating the board with fixed resistors and capacitors now.

Planning on using the MMR-40 with PSK-31 and Pocketdigi on a PDA. Have read your back posts on PDA-31 and am wondering if anyone has this rig working well on PSK of late. I know to drill some extra enclosure cooling holes around the final transistor, but have not seen if any other mods are recommended, especially while I am still building.

Ideas? Thanks-

72 DE AB8CJ SK

370. Re: Building MMR-40 - Any More Tips on PSK-31 Use?

Yahoo group: mmr40owngrp
Date: 2007-08-25 21:18:12 UTC
From: Garry
Topic: 369 Message: 370

Doug.

I have used mine MMR-40 for receive of psk-31 with my pda and Pocket digi and it works just fine. So far I have not used it for transmit yet.... sorta got sidetracked with other projects, silly things like building an antenna analyzer and then a better antenna. You know how those things go. I have not noticed any drifting on transmit with my rig but I did build it into a different enclosure with more space (and metal) so frequency shift due to warm up does not appear to be an issue.

I don't see it being a problem or don't anticipate any problems. Please keep us informed as to any issues that may surface.

Good luck on the build. I'm sure you will enjoy the radio.

73
Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "ab8cj" <DougBowling@...> wrote:
>
> Hi all-
>
> I'm Doug Bowling, AB8CJ. Am building an MMR-40. At this point I have
> L1 wound, and after going blind trying to count turns, I measured the
> wire thickness with my vernier caliper (.009") and then measured the
> whole coil. With the turns snugged up, but not doubled, I calculate
40
> turns are there so I'm happy. Am populating the board with fixed
> resistors and capacitors now.
>
> Planning on using the MMR-40 with PSK-31 and Pocketdigi on a PDA.
Have
> read your back posts on PDA-31 and am wondering if anyone has this
rig
> working well on PSK of late. I know to drill some extra enclosure
> cooling holes around the final transistor, but have not seen if any
> other mods are recommended, especially while I am still building.
>
> Ideas? Thanks-
>
> 72 DE AB8CJ SK
>

371. Low Power Out

Yahoo group: mmr40owngrp
Date: 2007-08-26 01:08:05 UTC
From: Roger Woods
Topic: 371 Message: 371

Hello everyone. I am a new member here. My call is KI4UTN. I live in North East Florida about 55 miles south of Jacksonville.

I have nor ordered my MMR-40 yet, but plan to do so in the near future. It will be my only rig as I can't afford better right now. Also I have a problem with antennas as I rent an appartment.

I have read all the posts about the low power out problem. One question comes to mind. Has anyone changed the output filter caps C44, C51, C52 and C53 with silver micas? They would be a much better cap in this application. Just a thought. Maybe someone can try this change.

Thanks for you time, Roger KI4UTN

372. Re: Low Power Out

Yahoo group: mmr40owngrp
Date: 2007-08-27 02:02:39 UTC
From: Garry
Topic: 371 Message: 372

Actually Roger. I believe the low power output issue (for some) has
been recently solved and had to do with 1 too many turns on a filter
coil if memory serves me correctly.

The post shouldn't be all that far back in the list.

Welcome to the group and best 73

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "Roger Woods" <threetoes1943@...>
wrote:
>
> Hello everyone. I am a new member here. My call is KI4UTN. I live
in
> North East Florida about 55 miles south of Jacksonville.
>
> I have nor ordered my MMR-40 yet, but plan to do so in the near
future.
> It will be my only rig as I can't afford better right now. Also I
have
> a problem with antennas as I rent an appartment.
>
> I have read all the posts about the low power out problem. One
question
> comes to mind. Has anyone changed the output filter caps C44, C51,
C52
> and C53 with silver micas? They would be a much better cap in this
> application. Just a thought. Maybe someone can try this change.
>
> Thanks for you time, Roger KI4UTN
>

373. Radio-active on with MMR-40

Yahoo group: mmr40owngrp
Date: 2007-08-29 17:58:19 UTC
From: dswain100
Topic: 373 Message: 373

Just want to encourage would-be builders. Operating the MMR-40 in phone mode from home (suburb of Chicago) over the weekend, I received 57 and 59 reports from two stations in TN and one in NC. I also got a 53 from AK. I put the full seven watts into my multiband sloper (24 to 7 feet up). The audio reports have been uniformily good (even from the AK station). This was surprising to me, since my microphone was a cheap rewired computer mic. So, hang in there, and don't let anybody convince you that you can't have good QS0's at QRP levels on SSB phone without an expensive antenna.

Thanks again to Steve Weber, KD1JV, for designing such a great kit!

73 de David AB9EI

374. Questions on MMR-40 construction

Yahoo group: mmr40owngrp
Date: 2007-08-29 19:35:33 UTC
From: ab8cj
Topic: 374 Message: 374

Hi all-

I have the MMR-40 board populated and double checked at this point. Am stopping work, as I have some questions I hope you all can answer:

- partswise, I have an extra 2N7000, and a LM78L 3 lead device (regulator?) that doesn't seem to belong to this kit. Is that bad?

- Ref L2, the instructions say make the main winding 28 turns, but the schematic says 29 turns. Which is right, or does it matter?

- T3 and T4, the bifilar wound transformers: do you twist the leads lightly as directed or keep them un-twisted as you wind the 5 turns? The last toroids I wound for another kit said don't twist- keep them from crossing over each other.

Thanks Garry for the tip to put it in a metal box.

After the above issues are settled, I will be ready to commence smoke testing and alignmnet.

Thanks,
Doug
AB8CJ

375. Re: [mmr40owngrp] Questions on MMR-40 construction

Yahoo group: mmr40owngrp
Date: 2007-08-29 23:01:18 UTC
From: Steven Weber
Topic: 374 Message: 375

> - partswise, I have an extra 2N7000, and a LM78L 3 lead device
> (regulator?) that doesn't seem to belong to this kit. Is that bad?
>

You simply got a few spare parts.

> - Ref L2, the instructions say make the main winding 28 turns, but the
> schematic says 29 turns. Which is right, or does it matter?
>

No, it doesn't matter.

> - T3 and T4, the bifilar wound transformers: do you twist the leads
> lightly as directed or keep them un-twisted as you wind the 5 turns?
> The last toroids I wound for another kit said don't twist- keep them
> from crossing over each other.

It doesn't really make any difference if thier twisted or not. It just
comes out a little neater if you do twist.
72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

376. sound quality

Yahoo group: mmr40owngrp
Date: 2007-09-01 01:00:33 UTC
From: ter753
Topic: 376 Message: 376

hi everyone, could anyone tell me what the ssb receive sound quality is like compared with other commercial rigs. I'm just curious. terry EI3IZ.

377. Re: sound quality

Yahoo group: mmr40owngrp
Date: 2007-09-01 23:28:40 UTC
From: Garry
Topic: 376 Message: 377

That's a tough one. To compare the little MMR-40 with a commercial rig. First of all the MMR-40 has no AGC so you get some variance there however as far as tuning in a station to where it is readable? NO PROBLEM.

Regarding audio quality, I found no problems either however how you adjust the bfo could have an affect of the tone of the audio so the builder adjusts to suit I would say but on mine there is no difficulty to understand what the other station is saying much the same as on my kenwood or Yaesu.

73

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "ter753" <ter753@...> wrote:
>
> hi everyone, could anyone tell me what the ssb receive sound quality
> is like compared with other commercial rigs. I'm just curious. terry
> EI3IZ.
>

378. mmr 40

Yahoo group: mmr40owngrp
Date: 2007-09-02 09:00:48 UTC
From: ter753
Topic: 378 Message: 378

Thanks Garry,your point about the bfo setting is right and sometimes it can be quite tricky to get that setting right on any rig when doing alignment. thanks, terry EI3IZ.

379. Progress, but no PTO

Yahoo group: mmr40owngrp
Date: 2007-09-03 20:59:42 UTC
From: ab8cj
Topic: 379 Message: 379

Hi all-

With Steve's info received I finished putting in the transformers and powered up the MMR-40 today. I cannot get the PTO to oscillate, but the rest of the receiver and BFO seem to work OK. Can hear ham CW on one freq only, and the PTO tuning doesn't change the freq. Likely am hearing 30 meters through the 10MHZ I.F.

If anyone knows any PTO "gotchas" that would keep it from oscillating I'd be interested, but am now going to go back and check windings, parts ,soldering, etc and see what I can find out.

73,
Doug
AB8CJ

380. PTO Problem Found

Yahoo group: mmr40owngrp
Date: 2007-09-04 01:29:42 UTC
From: ab8cj
Topic: 380 Message: 380

Yes, L2 is supposed to be wound in the same direction as the feedback winding. If however, you manage to reverse install the two ends of the feedback winding the Hartley oscillator gets no positive feedback! Having corrected that the PTO runs fine and adjusts over the proper frequency range.

Now moving on to receiver checks and adjustments-

Doug
Ab8CJ

381. mmr-40 finished-comments

Yahoo group: mmr40owngrp
Date: 2007-09-04 19:48:07 UTC
From: m0xdx
Topic: 381 Message: 381

Hi to all group members,

I finished my mmr-40 last night and boxed it up. I'm getting just over 8 Watts pep output,as measured on my cheap power meter!

I've worked 2 stations on ssb so far-SM5ZBJ who gave me 5/7 last night and GH6UW this morning who gave me 5/5. My antenna is a dipole at only 15 Feet.

Received audio is good,TX audio also sounds good to me when monitored on another Rx and recorded.I will post some mp3 files of rx and tx audio if thes would be helpful to members.

There is some intermod from strong European broadcast stations in the evening-I have reduced this by off-tuning T1 slightly.

Carrier suppression on mine is about 35dB,I'm going to try to improve this later.

The rig would of course benefit from AGC,have any members modified the Rx to include AGC?

Overall I think this is a great little rig,fun to build with a high quality pcb and great value for money.

73's Paul M0XDX

382. fcc-1 & mmr-40 freq

Yahoo group: mmr40owngrp
Date: 2007-09-05 03:51:01 UTC
From: Robert Conley
Topic: 382 Message: 382

Well my FCC-1 arrived today and 3 hours later it was built and
calibrated. Then I measured the PTO coil in my mmr-40.
The CW position:
With the switch towards the front my reading are:
2.879---in 2.740---out which translate to:
7.121---in 7.260---out
---------- IN & OUT REFERS to the screw -----
The SSB position
With the switch towards the rear my reading are:
2.251---in 72.616---out which translates to:
7.251---in 7.384---out
It looks like I need to remove a turn from L2?
AGREED?
Then recheck my freq range

383. correction

Yahoo group: mmr40owngrp
Date: 2007-09-05 06:08:04 UTC
From: Robert Conley
Topic: 383 Message: 383

Well my FCC-1 arrived today and 3 hours later it was built and
calibrated. Then I measured the PTO coil in my mmr-40.
The CW position:
With the switch towards the front my reading are:
2.879---in 2.740---out which translate to:
7.121---in 7.260---out
---------- IN & OUT REFERS to the screw -----
The SSB position
With the switch towards the rear my reading are:
2.249---in 2.616---out which translates to:
7.251---in 7.384---out
It looks like I need to remove a turn from L2?
AGREED?
Then recheck my freq range

384. Re: correction

Yahoo group: mmr40owngrp
Date: 2007-09-05 07:34:17 UTC
From: ron_ayling
Topic: 383 Message: 384

Why have you not put in the offset to your FCC-1 then it will read
correctly, much easier to calibrate :() my FCC-2 arrived yesterday,
what a task thats going to be, I can't even see some of the parts,
there are some bags with what looks like grains of sand in them!!
I'm looking forward to running the MMR-40 with the two VFO's as I
miss not having an RIT.
from Ron...

--- In mmr40owngrp@yahoogroups.com, "Robert Conley" <kc5wa@...> wrote:
>
> Well my FCC-1 arrived today and 3 hours later it was built and
> calibrated. Then I measured the PTO coil in my mmr-40.
> The CW position:
> With the switch towards the front my reading are:
> 2.879---in 2.740---out which translate to:
> 7.121---in 7.260---out
> ----------- IN & OUT REFERS to the screw -----
> The SSB position
> With the switch towards the rear my reading are:
> 2.249---in 2.616---out which translates to:
> 7.251---in 7.384---out
> It looks like I need to remove a turn from L2?
> AGREED?
> Then recheck my freq range
>

385. Re: [mmr40owngrp] Re: correction

Yahoo group: mmr40owngrp
Date: 2007-09-05 12:57:48 UTC
From: bob conley
Topic: 383 Message: 385

Because I was only trying to calibrate the PTO signal
and that was the frequency I was interested in. Page
12 of instructions state "You should find the
oscillator signal at 3 mhz. That is what I was looking
for.
RC kc5wa

--- ron_ayling <ron_ayling@...> wrote:

>
> Why have you not put in the offset to your FCC-1
> then it will read
> correctly, much easier to calibrate :() my FCC-2
> arrived yesterday,
> what a task thats going to be, I can't even see some
> of the parts,
> there are some bags with what looks like grains of
> sand in them!!
> I'm looking forward to running the MMR-40 with the
> two VFO's as I
> miss not having an RIT.
> from Ron...
>
> --- In mmr40owngrp@yahoogroups.com, "Robert Conley"
> <kc5wa@...> wrote:
> >
> > Well my FCC-1 arrived today and 3 hours later it
> was built and
> > calibrated. Then I measured the PTO coil in my
> mmr-40.
> > The CW position:
> > With the switch towards the front my reading are:
> > 2.879---in 2.740---out which translate to:
> > 7.121---in 7.260---out
> > ----------- IN & OUT REFERS to the screw -----
> > The SSB position
> > With the switch towards the rear my reading are:
> > 2.249---in 2.616---out which translates to:
> > 7.251---in 7.384---out
> > It looks like I need to remove a turn from L2?
> > AGREED?
> > Then recheck my freq range
> >
>
>

>

Pinpoint customers who are looking for what you sell.
http://searchmarketing.yahoo.com/

386. CALIBRATED

Yahoo group: mmr40owngrp
Date: 2007-09-06 01:48:06 UTC
From: Robert Conley
Topic: 386 Message: 386

Okay my MMR-40 is NOW calibrated:

ORIGINAL TEST READINGS

The CW position:
With the switch towards the front my reading are:
2.879---in 2.740---out which translate to:
7.121---in 7.260---out
---------- IN & OUT REFERS to the screw -----
The SSB position
With the switch towards the rear my reading are:
2.249---in 2.616---out which translates to:
7.251---in 7.384---out
It looks like I need to remove a turn from L2?

REMOVED ONE TURN
The CW position:
With the switch towards the front my reading are:
2.91565---in 2.77146---out which translate to:
7.08435---in 7.22854---out
---------- IN & OUT REFERS to the screw -----
The SSB position
With the switch towards the rear my reading are:
2.78425---in 2.64635---out which translates to:
7.21575---in 7.35365---out
It looks like I need to remove ANOTHER turn from L2?

REMOVED SECOND TURN
The CW position:
With the switch towards the front my reading are:
2.94909---in 2.80012---out which translate to:
7.05091---in 7.19998---out
---------- IN & OUT REFERS to the screw -----
The SSB position
With the switch towards the rear my reading are:
2.81825---in 2.67382---out which translates to:
7.19175---in 7.32618---out
It looks like I need to remove ANOTHER turn from L2?

REMOVED A THIRD TURN
The CW position:
With the switch towards the front my reading are:
2.98557---in 2.82873---out which translate to:
7.01443---in 7.17127---out---------------THIS IS CLOSE ENOUGH FOR CW
---------- IN & OUT REFERS to the screw -----
The SSB position

With the switch towards the rear my reading are:
2.85116---in 2.70115---out which translates to:
7.14884---in 7.29885---out----------THIS IS CLOSE ENOUGH FOR SSB

387. Re: fcc-1 & mmr-40 freq

Yahoo group: mmr40owngrp
Date: 2007-09-06 22:55:20 UTC
From: phaydenlex
Topic: 382 Message: 387

--- In mmr40owngrp@yahoogroups.com, "Robert Conley" <kc5wa@...> wrote:
>
> Well my FCC-1 arrived today and 3 hours later it was built and
> calibrated. Then I measured the PTO coil in my mmr-40.
> The CW position:
> With the switch towards the front my reading are:
> 2.879---in 2.740---out which translate to:
> 7.121---in 7.260---out
> ---------- IN & OUT REFERS to the screw -----
> The SSB position
> With the switch towards the rear my reading are:
> 2.251---in 72.616---out which translates to:
> 7.251---in 7.384---out
> It looks like I need to remove a turn from L2?
> AGREED?
> Then recheck my freq range
>

Hey dont stop there!! how about adding the FCC2 !?! Then you can drop the whole brass screw osc. thing altogether!! check out my photos under ki4qcs album..

Pat

388. So Far So Good!

Yahoo group: mmr40owngrp
Date: 2007-09-07 11:47:56 UTC
From: ab8cj
Topic: 388 Message: 388

Hi all-

Well, my MMR-40 tuned up to abt 6 watts output, so I put it on the air last night and got a 589 report from WD4LDC in Louisville, KY. That said, I need to finish the case work and wax seal the PTO area. Will get it going on SSB shortly to refine the BFO setting. I have a dynamic desk mike for that, but will use a condenser mike for portable ops.

Am impressed by the PTO stability and the built in receive audio filtering. Nice rig for the price!

73,
Doug
AB8CJ

389. Re: fcc-1 & mmr-40 freq

Yahoo group: mmr40owngrp
Date: 2007-09-07 17:37:57 UTC
From: ron_ayling
Topic: 382 Message: 389

Hi Pat
Out of interest how are you using your FCC2 for CW, are you using the two VFO's?
from Ron...

> Hey dont stop there!! how about adding the FCC2 !?! Then you can
> drop the whole brass screw osc. thing altogether!! check out my
> photos under ki4qcs album..
>
> Pat
>

390. threaded nylon hex spacers

Yahoo group: mmr40owngrp
Date: 2007-09-07 19:06:25 UTC
From: Robert Conley
Topic: 390 Message: 390

Just in case you want some there is a supply
available on that auction web site or
"Walter-Winds-Hardware-Emporium" price is good

391. Re: fcc-1 & mmr-40 freq

Yahoo group: mmr40owngrp
Date: 2007-09-08 02:52:32 UTC
From: phaydenlex
Topic: 382 Message: 391

Not sure of your question....

If you are refuring to the DSS VFO and PTO VFO, then no, just break the
PTO Injection and use only the DDS.

If you mean DDS VFO-A and VFO-B then yes!

Don't forget to Ground FCC pad(KEY)ON trans.
This way you have one VFO/Feq. for RECI. and one VFO/Feq for Transmit!
hence working splits... bust up those QRP pile ups!!! :)

Pat
Ki4qcs

--- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@...> wrote:
>
> Hi Pat
> Out of interest how are you using your FCC2 for CW, are you using the
> two VFO's?
> from Ron...
>
> > Hey dont stop there!! how about adding the FCC2 !?! Then you can
> > drop the whole brass screw osc. thing altogether!! check out my
> > photos under ki4qcs album..
> >
> > Pat
> >
>

392. Keying with a K1EL WinKeyer2

Yahoo group: mmr40owngrp
Date: 2007-09-08 04:46:10 UTC
From: Don Hatlestad
Topic: 392 Message: 392

I built a K1EL WinKeyer2 that works fine with my ICOM but will not key my MMR-40. Anyone tried this? Where should I start trouble-shooting.

Don, AC7FA
http://ac7fa.net

393. Re: fcc-1 & mmr-40 freq

Yahoo group: mmr40owngrp
Date: 2007-09-08 07:49:47 UTC
From: ron_ayling
Topic: 382 Message: 393

Hi Pat
Yes I was interested in how you were using the two VFO's in as much as if you use VFO A for tuning how do you set B VFO for transmit? if you set A for zero beat and then load B owing to the offset of the BFO against the filter you would be off frequency when you transmit, I suppose you could tune A for the best result in the active filter then load B which gets it more or less right, just interested to know how you get the best results, I'm still struggling with the grains of sand, I've had to make a fine tip adapter for my soldering iron :()be there shortly I hope.

from Ron.

--- In mmr40owngrp@yahoogroups.com, "phaydenlex" <phaydenlex@...> wrote:
>
> Not sure of your question....
>
> If you are refuring to the DSS VFO and PTO VFO, then no, just break the
> PTO Injection and use only the DDS.
>
> If you mean DDS VFO-A and VFO-B then yes!
>
> Don't forget to Ground FCC pad(KEY)ON trans.
> This way you have one VFO/Feq. for RECI. and one VFO/Feq for Transmit!
> hence working splits... bust up those QRP pile ups!!! :)
>
>
> Pat
> Ki4qcs
>
>
> --- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@> wrote:
> >
> > Hi Pat
> > Out of interest how are you using your FCC2 for CW, are you using the
> > two VFO's?
> > from Ron...
> >
> > > Hey dont stop there!! how about adding the FCC2 !?! Then you can

> > > drop the whole brass screw osc. thing altogether!! check out
my
> > > photos under ki4qcs album..
> > >
> > > Pat
> > >
> >
>

394. Re: Keying with a K1EL WinKeyer2

Yahoo group: mmr40owngrp
Date: 2007-09-08 10:26:39 UTC
From: Bruce Beford
Topic: 392 Message: 394

Make sure the WinKeyer is using a mono plug to connect to the MMR-40. A stereo plug will not put the MMR-40 into CW mode when insterted into the mic/key jack.

-Bruce N1RX

--- In mmr40owngrp@yahoogroups.com, "Don Hatlestad" <don.ac7fa@...> wrote:
>
> I built a K1EL WinKeyer2 that works fine with my ICOM but will not key
> my MMR-40. Anyone tried this? Where should I start trouble-shooting.
>
> Don, AC7FA
> http://ac7fa.net
>

395. Further Success!

Yahoo group: mmr40owngrp
Date: 2007-09-08 12:24:39 UTC
From: ab8cj
Topic: 395 Message: 395

Hi all-

I got the MMR-40 in it's case, made a microphone out of a condenser mike, a small pushbutton switch, housed in a .58 caliber musket loading tube :-)

Put the mike gain up abt 1/3, and got 8 watts peak output. This morning have gotten good signal reports from CT and FL (from OH).

73,
Doug
AB8CJ

396. Re: [mmr40owngrp] threaded nylon hex spacers

Yahoo group: mmr40owngrp
Date: 2007-09-08 17:21:21 UTC
From: Lee Mairs (SAG)
Topic: 390 Message: 396

Darned if I can find it! Can you give me a better, more exact hint?
73 de Lee
KM4YY

Robert Conley wrote:
> Just in case you want some there is a supply
> available on that auction web site or
> "Walter-Winds-Hardware-Emporium" price is good
>
>
>
>
>
> Yahoo! Groups Links
>
>
>
>
>

397. Re: fcc-1 & mmr-40 freq

Yahoo group: mmr40owngrp
Date: 2007-09-08 19:14:20 UTC
From: phaydenlex
Topic: 382 Message: 397

look at photo in the below link.

http://www.ki4qcs.com/MMR-40%20QRP%20Transceiver%
20Kit/IMG_0057small.jpg

the photo shows clearly the two solder KEY Pads (1 TX and 1 GND)
located in the top RIGHT

Keep in mind this photo was and early build photo, as I had not yet
solder the (Key) pads yet.

When the Key TX sig is grounded the FCC2 Switches over from VFO-A to
VFO-B.

Therefore connect your PTT to Key/Sig. and set the FCC for Splits in
the FCC SOftware.

Pat

> > Don't forget to Ground FCC pad(KEY)ON trans.
> > This way you have one VFO/Feq. for RECI. and one VFO/Feq for
> Transmit!
> > hence working splits... bust up those QRP pile ups!!! :)

--- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@...>
wrote:
>
> Hi Pat
> Yes I was interested in how you were using the two VFO's in as much
> as if you use VFO A for tuning how do you set B VFO for transmit?
if
> you set A for zero beat and then load B owing to the offset of the
> BFO against the filter you would be off frequency when you
transmit,
> I suppose you could tune A for the best result in the active filter
> then load B which gets it more or less right, just interested to
know
> how you get the best results, I'm still struggling with the grains
of
> sand, I've had to make a fine tip adapter for my soldering iron :()
be
> there shortly I hope.
>
> from Ron.
>
>
>

> --- In mmr40owngrp@yahoogroups.com, "phaydenlex" <phaydenlex@>
> wrote:
> >
> > Not sure of your question....
> >
> > If you are refuring to the DSS VFO and PTO VFO, then no, just
break
> the
> > PTO Injection and use only the DDS.
> >
> > If you mean DDS VFO-A and VFO-B then yes!
> >
> > Don't forget to Ground FCC pad(KEY)ON trans.
> > This way you have one VFO/Feq. for RECI. and one VFO/Feq for
> Transmit!
> > hence working splits... bust up those QRP pile ups!!! :)
> >
> >
> > Pat
> > Ki4qcs
> >
> >
> > --- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@>
> wrote:
> > >
> > > Hi Pat
> > > Out of interest how are you using your FCC2 for CW, are you
using
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> > > two VFO's?
> > > from Ron...
> > >
> > > > Hey dont stop there!! how about adding the FCC2 !?! Then you
> can
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> my
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> > > >
> > > > Pat
> > > >
> > >
> >
>

398. Re: Keying with a K1EL WinKeyer2

Yahoo group: mmr40owngrp
Date: 2007-09-09 00:28:02 UTC
From: Don Hatlestad
Topic: 392 Message: 398

My NorCal keyer works and I understand the clever method Steve used to
use the same jack for a mic and a key. Thanks.

--- In mmr40owngrp@yahoogroups.com, "Bruce Beford" <bruce.beford@...>
wrote:
>
> Make sure the WinKeyer is using a mono plug to connect to the MMR-40. A
> stereo plug will not put the MMR-40 into CW mode when insterted into
> the mic/key jack.
>
> -Bruce N1RX
>
> --- In mmr40owngrp@yahoogroups.com, "Don Hatlestad" <don.ac7fa@>
> wrote:
> >
> > I built a K1EL WinKeyer2 that works fine with my ICOM but will not key
> > my MMR-40. Anyone tried this? Where should I start trouble-shooting.
> >
> > Don, AC7FA
> > http://ac7fa.net
> >
>

399. Re: fcc-1 & mmr-40 freq

Yahoo group: mmr40owngrp
Date: 2007-09-09 09:07:40 UTC
From: ron_ayling
Topic: 382 Message: 399

Hi Pat
I think you missed my point, I know how to connect the FCC1/2
my interest was in its operation with the MMR-40
Just to clarify, with normal calling CW operation on a transceiver
(correct me if I'm wrong) is you set your RIT to centre, then tune to
zero beat using your main tuning control then use your RIT for best
signal and then transmit, this way both stations are on the same freq
and use minimum bandspace, you can't do this with an MMR-40 as it has
no RIT, with the MMR-40 (again correct me if I'm wrong) you should
tune for best CW signal in the active filter and then transmit as it
seems the offset freq of the BFO in the MMR-40 matches the bandpass
freq of the active filter, the problem starts if you call CQ on an
MMR-40 and get a reply that is not exactly on your freq, you can't
use your main tuning to get the best result from your active filter
otherwise you start freq chasing the other station, so I just
wondered how the FCC1/2 combo was used to overcome this with the MMR-
40, but no problem it was just idle interest on my part nothing
more :)

from Ron...

--- In mmr40owngrp@yahoogroups.com, "phaydenlex" <phaydenlex@...>
wrote:
>
> look at photo in the below link.
>
> http://www.ki4qcs.com/MMR-40%20QRP%20Transceiver%
> 20Kit/IMG_0057small.jpg
>
> the photo shows clearly the two solder KEY Pads (1 TX and 1 GND)
> located in the top RIGHT
>
> Keep in mind this photo was and early build photo, as I had not yet
> solder the (Key) pads yet.
>
> When the Key TX sig is grounded the FCC2 Switches over from VFO-A
to
> VFO-B.
>
> Therefore connect your PTT to Key/Sig. and set the FCC for Splits
in
> the FCC SOftware.
>
> Pat
>

>
>
>
> > > Don't forget to Ground FCC pad(KEY)ON trans.
> > > This way you have one VFO/Feq. for RECI. and one VFO/Feq for
> > Transmit!
> > > hence working splits... bust up those QRP pile ups!!! :)
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>
>
>
> --- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@>
> wrote:
> >
> > Hi Pat
> > Yes I was interested in how you were using the two VFO's in as
much
> > as if you use VFO A for tuning how do you set B VFO for transmit?
> if
> > you set A for zero beat and then load B owing to the offset of
the
> > BFO against the filter you would be off frequency when you
> transmit,
> > I suppose you could tune A for the best result in the active
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> > then load B which gets it more or less right, just interested to
> know
> > how you get the best results, I'm still struggling with the
grains
> of
> > sand, I've had to make a fine tip adapter for my soldering iron :
()
> be
> > there shortly I hope.
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> > from Ron.
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> >
> >
> > --- In mmr40owngrp@yahoogroups.com, "phaydenlex" <phaydenlex@>
> > wrote:
> > >
> > > Not sure of your question....
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> > > If you are refuring to the DSS VFO and PTO VFO, then no, just
> break
> > the
> > > PTO Injection and use only the DDS.
> > >

> > > If you mean DDS VFO-A and VFO-B then yes!
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> > > Don't forget to Ground FCC pad(KEY)ON trans.
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> > >
> > >
> > > Pat
> > > Ki4qcs
> > >
> > >
> > > --- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@>
> > wrote:
> > > >
> > > > Hi Pat
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> > > > > Pat
> > > > > >
> > > > >
> > > >
> > >
> >
>

400. Re: Keying with a K1EL WinKeyer2

Yahoo group: mmr40owngrp
Date: 2007-09-09 11:08:25 UTC
From: Bruce Beford
Topic: 392 Message: 400

--- In mmr40owngrp@yahoogroups.com, "Don Hatlestad" <don.ac7fa@...>
wrote:
>
> My NorCal keyer works and I understand the clever method Steve used to
> use the same jack for a mic and a key. Thanks.
>

OK, Don. The only other possibility that comes to mind is a difference in the output keying device in the WinKeyer. The Norcal uses a 2n7000 FET, I believe. This has a pretty low on-resistance. Not sure what the output device is in the Winkeyer, but suspect possibly the on-resistance is not low enough to trigger the MMR-40?

GL,
Bruce

401. Re: fcc-1 & mmr-40 freq

Yahoo group: mmr40owngrp
Date: 2007-09-09 15:47:29 UTC
From: phaydenlex
Topic: 382 Message: 401

OK I now understand your question..

But I dont know how to answer your question.. as you saw in the pics. the $.99 key sending unit should be a stong flag that I am not that skilled in CW, although I am making a strong effort in getting more effective in that area..

I think you can set recive TONE <(not same as rit) on the main mmr-40 board.. so maybe with the combo of feq. and tone you can in effect zero beat on a signal..

Sorry for the poor answer, it may be better to pose this question to the designer..

Pat-

--- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@...> wrote:
>
> Hi Pat
> I think you missed my point, I know how to connect the FCC1/2
> my interest was in its operation with the MMR-40
> Just to clarify, with normal calling CW operation on a transceiver
> (correct me if I'm wrong) is you set your RIT to centre, then tune to
> zero beat using your main tuning control then use your RIT for best
> signal and then transmit, this way both stations are on the same freq
> and use minimum bandspace, you can't do this with an MMR-40 as it has
> no RIT, with the MMR-40 (again correct me if I'm wrong) you should
> tune for best CW signal in the active filter and then transmit as it
> seems the offset freq of the BFO in the MMR-40 matches the bandpass
> freq of the active filter, the problem starts if you call CQ on an
> MMR-40 and get a reply that is not exactly on your freq, you can't
> use your main tuning to get the best result from your active filter
> otherwise you start freq chasing the other station, so I just
> wondered how the FCC1/2 combo was used to overcome this with the MMR-
> 40, but no problem it was just idle interest on my part nothing
> more :)
>
> from Ron...
>
> --- In mmr40owngrp@yahoogroups.com, "phaydenlex" <phaydenlex@>

> wrote:
> >
> > look at photo in the below link.
> >
> > http://www.ki4qcs.com/MMR-40%20QRP%20Transceiver%
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> > the photo shows clearly the two solder KEY Pads (1 TX and 1 GND)
> > located in the top RIGHT
> >
> > Keep in mind this photo was and early build photo, as I had not
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> > solder the (Key) pads yet.
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> > > > Don't forget to Ground FCC pad(KEY)ON trans.
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> > --- In mmr40owngrp@yahoogroups.com, "ron_ayling" <ron_ayling@>
> > wrote:
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> > > Hi Pat
> > > Yes I was interested in how you were using the two VFO's in as
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> > > as if you use VFO A for tuning how do you set B VFO for
transmit?
> > if
> > > > you set A for zero beat and then load B owing to the offset of
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> > > > BFO against the filter you would be off frequency when you
> > transmit,
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> > > then load B which gets it more or less right, just interested
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> > > from Ron.
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> > > --- In mmr40owngrp@yahoogroups.com, "phaydenlex" <phaydenlex@>
> > > wrote:
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> > > > Not sure of your question....
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> > > >
> > > > Pat
> > > > Ki4qcs
> > > >
> > > >
> > > > --- In mmr40owngrp@yahoogroups.com, "ron_ayling"
<ron_ayling@>
> > > wrote:
> > > > >
> > > > > Hi Pat
> > > > > Out of interest how are you using your FCC2 for CW, are you
> > using
> > > the
> > > > > two VFO's?
> > > > > from Ron...
> > > > >

> > > > > > Hey dont stop there!! how about adding the FCC2 !?! Then
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> > > can
> > > > > > drop the whole brass screw osc. thing altogether!! check
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> > > my
> > > > > > photos under ki4qcs album..
> > > > > >
> > > > > > Pat
> > > > > >
> > > > >
> > > >
> > >
> >
>

402. So where to begin?

Yahoo group: mmr40owngrp
Date: 2007-09-09 23:38:00 UTC
From: Robert Conley
Topic: 402 Message: 402

I've just completed the transmitter section. I measured 7.66vdc on my DVM. Everything went smoothly. I installed the heat sink for Q10 then Q10.
I was setting up to adjust the power out in the next step. I had my Norcal Dummy load attached to measure the vdc on it when I noticed a wisp of SMOKE from the 12vdc battery pack I have been using all though the build. The springs that hold the batteries were so hot (AA batteries also were hot) they were melting into the plastic holder. Up to this point every was working just fine.....
I've measured Q10 Tab to ground..okay no shorts
Also noted the lack of audio
Was the TX keyed and pulling to much current?
I'm stumped need to stop and think........

403. Ideas on Coupling Audio From a PDA to the MMR-40 Mic Input?

Yahoo group: mmr40owngrp
Date: 2007-09-10 01:21:01 UTC
From: ab8cj
Topic: 403 Message: 403

Hi all-

Tonight I set up the MMR-40 for PSK-31 receive and that went very well. The I tried to transmit and found that the audio transformer I am using to couple audio from the PDA to the Mic input also triggers on the CW tone oscillator. I use the low impedance winding of the transformer on the PDA speaker output, and the high impedance side goes to the Mic input. Unfortunately the hi side of the transformer is not a high enough impedance, it seems.

So.....how can I couple the audio into the Mic without triggering the CW oscillator? Any ideas would be appreciated.

Thanks,

Doug
AB8CJ

404. Re: Ideas on Coupling Audio From a PDA to the MMR-40 Mic Input?

Yahoo group: mmr40owngrp
Date: 2007-09-10 01:33:54 UTC
From: kd1jv
Topic: 403 Message: 404

--- In mmr40owngrp@yahoogroups.com, "ab8cj" <DougBowling@...> wrote:
>
> Hi all-
> So.....how can I couple the audio into the Mic without triggering the
> CW oscillator? Any ideas would be appreciated.
>

Use a blocking capacitor! A 0.1 between the transformer and mic input
should do the trick.

KD1JV

405. Re: So where to begin?

Yahoo group: mmr40owngrp
Date: 2007-09-10 01:39:36 UTC
From: kd1jv
Topic: 402 Message: 405

> Was the TX keyed and pulling to much current?
> I'm stumped need to stop and think........

Most definatly. If your not careful with the bias adjust, the PA can draw a LOT of current. When workking properly, peak current is close to an amp on voice peaks or CW. Thats why I recommend putting a 2A fuse in line. AA batteries really are not suitable for running this rig, except for receiving. And I bet there were just little tiny wires going into the battery pack to boot! Begin by getting a more suitable power supply and making sure the PA bias is set to no more than 20 ma.

KD1JV

406. Re: [mmr40owngrp] Re: So where to begin?

Yahoo group: mmr40owngrp
Date: 2007-09-10 02:45:42 UTC
From: bob conley
Topic: 402 Message: 406

If the rig is being keyed, what's keying it?
Everything was correct until the PA (Q10) and the heat
sink was installed
RC kc5wa
--- kd1jv <kd1jv@...> wrote:

> > Was the TX keyed and pulling to much current?
> > I'm stumped need to stop and think.....
>
>
> Most definatly. If your not careful with the bias
> adjust, the PA can
> draw a LOT of current. When workking properly, peak
> current is close to
> an amp on voice peaks or CW. Thats why I recommend
> putting a 2A fuse in
> line. AA batteries really are not suitable for
> running this rig, except
> for receiving. And I bet there were just little tiny
> wires going into
> the battery pack to boot! Begin by getting a more
> suitable power supply
> and making sure the PA bias is set to no more than
> 20 ma.
>
> KD1JV
>
>
>

Boardwalk for $500? In 2007? Ha! Play Monopoly Here and Now (it's updated for today's
economy) at Yahoo! Games.
http://get.games.yahoo.com/proddesc?gamekey=monopolyherenow

407. Re: So where to begin?

Yahoo group: mmr40owngrp
Date: 2007-09-10 03:05:15 UTC
From: kd1jv
Topic: 402 Message: 407

--- In mmr40owngrp@yahoogroups.com, bob conley <kc5wa@...> wrote:
>
> If the rig is being keyed, what's keying it?
> Everything was correct until the PA (Q10) and the heat
> sink was installed

I don't know. Something must have changed. Hard tell'en not know'en.
The PA shouldn't draw any current if the rig isn't being keyed.

KD1JV

408. Birthday Reminder

Yahoo group: mmr40owngrp
Date: 2007-09-10 03:55:38 UTC
From: mmr40owngrp@yahoogroups.com
Topic: 408 Message: 408

Reminder from: mmr40owngrp Yahoo! Group
http://groups.yahoo.com/group/mmr40owngrp/cal

Kyle 13th birthday
Monday September 10, 2007
All Day
Location: Sanford, FL

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Terms of Service:
http://docs.yahoo.com/info/terms/

409. Re: So where to begin?

Yahoo group: mmr40owngrp
Date: 2007-09-10 07:58:28 UTC
From: ron_ayling
Topic: 402 Message: 409

Same thing happened to me, in my case the anodising on the heat sink was faulty and the PA transistor shorted to the heat sink, testing with a DVM didn't show it for some reason? remove the nylon bolt and see if the high current clears, if it does fit a mica washer between the device and the sink using some heatsink compound, thats what I did and its ok, I also noticed PCB tracks go under the bottom of the sink, I suppose its possible to short them out if the sink is to hard onto the PCB.

--- In mmr40owngrp@yahoogroups.com, "Robert Conley" <kc5wa@...> wrote:
>
> I've just completed the transmitter section. I measured 7.66vdc on my
> DVM. Everything went smoothly. I installed the heat sink for Q10 then
> Q10.
> I was setting up to adjust the power out in the next step. I had my
> Norcal Dummy load attached to measure the vdc on it when I noticed a
> wisp of SMOKE from the 12vdc battery pack I have been using all though
> the build. The springs that hold the batteries were so hot (AA
> batteries also were hot) they were melting into the plastic holder. Up
> to this point every was working just fine.....
> I've measured Q10 Tab to ground..okay no shorts
> Also noted the lack of audio
> Was the TX keyed and pulling to much current?
> I'm stumped need to stop and think........
>

410. Re: [mmr40owngrp] So where to begin?

Yahoo group: mmr40owngrp
Date: 2007-09-10 03:18:07 UTC
From: Bill Linn
Topic: 402 Message: 410

Robert, be sure to check the battery holder itself. In recent times I had a spring in one of the cheapo holders that shorted the battery itself.. Just a hopeful thought. (All that current through a component would surely let more smoke out!)

Bill - W7WEL

----- Original Message -----
From: "Robert Conley" <kc5wa@...>
To: <mmr40owngrp@yahoogroups.com>
Sent: Sunday, September 09, 2007 4:38 PM
Subject: [mmr40owngrp] So where to begin?

> I've just completed the transmitter section. I measured 7.66vdc on my
> DVM. Everything went smoothly. I installed the heat sink for Q10 then
> Q10.
> I was setting up to adjust the power out in the next step. I had my
> Norcal Dummy load attached to measure the vdc on it when I noticed a
> wisp of SMOKE from the 12vdc battery pack I have been using all though
> the build. The springs that hold the batteries were so hot (AA
> batteries also were hot) they were melting into the plastic holder. Up
> to this point every was working just fine.....
> I've measured Q10 Tab to ground..okay no shorts
> Also noted the lack of audio
> Was the TX keyed and pulling to much current?
> I'm stumped need to stop and think........
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> Yahoo! Groups Links
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> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.485 / Virus Database: 269.13.12/997 - Release Date: 9/9/2007
> 10:17 AM
>
>

411. Re: Keying with a K1EL WinKeyer2

Yahoo group: mmr40owngrp
Date: 2007-09-10 16:40:49 UTC
From: Don Hatlestad
Topic: 392 Message: 411

--- In mmr40owngrp@yahoogroups.com, "Bruce Beford" <bruce.beford@...>
wrote:
>
> --- In mmr40owngrp@yahoogroups.com, "Don Hatlestad" <don.ac7fa@>
> wrote:
> >
> > My NorCal keyer works and I understand the clever method Steve
used to
> > use the same jack for a mic and a key. Thanks.
> >
>
> OK, Don. The only other possibility that comes to mind is a
difference
> in the output keying device in the WinKeyer. The Norcal uses a
2n7000
> FET, I believe. This has a pretty low on-resistance. Not sure what
the
> output device is in the Winkeyer, but suspect possibly the on-
> resistance is not low enough to trigger the MMR-40?
>
> GL,
> Bruce
>

Thank you for your analysis. My Winkeyer2 drops the on-resistance to
just over 15 ohms. Perhaps that is not low enough.

Don, AC7Fa
http://ac7fa.net

412. PSK working great on MMR-40!

Yahoo group: mmr40owngrp
Date: 2007-09-11 11:45:26 UTC
From: ab8cj
Topic: 412 Message: 412

Hi all-

Well, I tried KD1JV's suggestion on using a blocking cap to turn off the CW tone generator for PSK- it kinda worked-. Got some tone generator output anyway, for some reason: the output would not settle down to idle with no PSK audio applied. The mod that did the trick was interrupting the tone generator output between R36 and C68. That makes no CW tone output possible, except when a small switch is closed to complete the path again.

Am getting great reports on PSK. Last step is to run the rig on my portable dipole and batteries, then I'm ready to try it on a backpack trip.

Thanks for your help- now thing about FCC-1 and 2 add-ons!

73,
Doug
AB8CJ

413. So where to begin? REVISITED

Yahoo group: mmr40owngrp
Date: 2007-09-11 21:48:28 UTC
From: Robert Conley
Topic: 413 Message: 413

today I built a power cable capable of handing 10+ amps using red/black multi-lead wire with a fuse holder into which a 2 amp fuse was placed. This was plugged in to a VHF Engineering 20 amp 12-14 VDC regulated power supply. Then plugged into the MMR-40. I connected an Elecraft WM-1 SWR/WATT meter with a dummy load. Then turned on the power supply. THE MMR-40 DID NOT GO INTO TRANSMIT MODE. Audio hiss could be heard from the speaker. I turned off power replaced the dummy load with an antenna turned the power back on and signals jumped from the speaker. I don't know what the problem was but it seems to be okay now as sit and listen to a CW contact on 7.058 mhz NOW to set the BIAS.
RC kc5wa

414. Placed Order

Yahoo group: mmr40owngrp
Date: 2007-09-12 01:15:13 UTC
From: Roger Woods
Topic: 414 Message: 414

Hello group:

I just placed an order for a MMR-40, FCC-1 and FCC2. How long do you usually have to wait for shipping?

From the posts I have read, it seems smart to install all the PTO, 13.8 volt input and 5 volt regulators components, and get the PTO on frequency before installing the rest of the parts.

I have a telephone handset that I can rob the electret mic.

Will be using a end-fed half-wave antenna with a simple tuner. Has anyone tried this with sucess?

Roger, KI4UTN

415. Re: Placed Order

Yahoo group: mmr40owngrp
Date: 2007-09-12 01:21:20 UTC
From: Garry
Topic: 414 Message: 415

Yes on the en-fed half wave. I used one for field day this year (mostly for cw though) and the SLT tuner to tune it and I was suitably impressed with the performance of this antenna. Initially I wanted to get it as vertical as possible but I settled for using a couple of Crappie poles to support it and set it up as a fairly low inverted L. I did work several stations using ssb but had much better success with cw as one might expect. I expect I'll do about the same thing for next year.

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "Roger Woods" <threetoes1943@...> wrote:
>
> Hello group:
>
> I just placed an order for a MMR-40, FCC-1 and FCC2. How long do you
> usually have to wait for shipping?
>
> From the posts I have read, it seems smart to install all the PTO, 13.8
> volt input and 5 volt regulators components, and get the PTO on
> frequency before installing the rest of the parts.
>
> I have a telephone handset that I can rob the electret mic.
>
> Will be using a end-fed half-wave antenna with a simple tuner. Has
> anyone tried this with sucess?
>
> Roger, KI4UTN
>

416. Another MMR-40 lives

Yahoo group: mmr40owngrp
Date: 2007-09-12 02:45:34 UTC
From: Robert Conley
Topic: 416 Message: 416

bias set at 125 ma
power out at 7 watts
RC kc5wa

417. Re: Another MMR-40 lives

Yahoo group: mmr40owngrp
Date: 2007-09-12 14:09:26 UTC
From: tiana891
Topic: 416 Message: 417

Congratulations RC.

I got out my soldering iron last night and started soldering. I had a question about how the PTO went together so I pulled up your MMR-40 web page and it sure helped. This is my first transceiver kit so I need all the help I can get. hi hi And Thanks to Steve's great manuel I'm about half way through soldering in the resistors. I doing one part at a time double checking each. I have some very young children so I can only work on the kit when they are sleeping. It may take me awhile to get it done.

Congratulations again RC you have a great website that excites me to try even more projects.

73 Tiana KE5ODX

-- In mmr40owngrp@yahoogroups.com, "Robert Conley" <kc5wa@...> wrote:
>
> bias set at 125 ma
> power out at 7 watts
> RC kc5wa
>

418. Re: [mmr40owngrp] So where to begin? REVISITED

Yahoo group: mmr40owngrp
Date: 2007-09-12 17:15:15 UTC
From: Steven Weber
Topic: 413 Message: 418

> power supply. THE MMR-40 DID NOT GO INTO TRANSMIT MODE.

Thats good. Low voltage might have had something to do with it, or
something on the work bench shorting something out. Just one of those
little mysteries of homebrewing. Or one of those pesty and sneaky Gremlins
at work. They really like to go around and hide tools on me :-)
72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

419. New file uploaded to mmr40owngrp

Yahoo group: mmr40owngrp
Date: 2007-09-12 19:12:23 UTC
From: mmr40owngrp@yahoogroups.com
Topic: 19 Message: 419

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the mmr40owngrp
group.

File : /MMR-40.pdf
Uploaded by : kc5wa <kc5wa@...>
Description : a completed MMR-40 build

You can access this file at the URL:
http://groups.yahoo.com/group/mmr40owngrp/files/MMR-40.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/help/us/groups/files

Regards,

kc5wa <kc5wa@...>

420. 4.7 p capacitors

Yahoo group: mmr40owngrp
Date: 2007-09-20 16:15:54 UTC
From: tiana891
Topic: 420 Message: 420

In my kit I don't have two 4.7 p capacitors but I have two capacitors that have "5 100v" on them. Are these a sub for the 4.7's?

Thanks Tiana KE5ODX

421. 4.7 pf caps

Yahoo group: mmr40owngrp
Date: 2007-09-23 19:07:36 UTC
From: ter753
Topic: 421 Message: 421

It sounds like those are 5pf caps, if so they should work fine!. Try them it wont do any harm. 73s, terry ei3iz.

422. Finally might be getting on the air

Yahoo group: mmr40owngrp
Date: 2007-09-23 22:01:59 UTC
From: Thomas Butchers
Topic: 422 Message: 422

Hello all,

While this might not be "QRP" per say, it looks like I may have finally closed a deal for my first starter rig. Granted if I had my choice I would buy an IC 746 Pro or a fully loaded K2 but that wasn't going to happen soooooo..... it looks like I will take possession of a TS-430s. I know most of you are saying so what but I'm excited.

73's Tom kf4yyd

423. Another MMR-40 on the air

Yahoo group: mmr40owngrp
Date: 2007-10-03 03:52:48 UTC
From: Bob
Topic: 423 Message: 423

Just finished the circuit board build of the kit. Receiver sounds great, copied many CW and SSB stations. Only had one hitch after installing the IRF510. The output was only 1 watt with V4 turned full up. Re-adjusted T3 & 4 and then had full 7 watts output with 13.5v. Not sure why this happened because I was able to peek to more than 7 volts with the build in detector probe on IRF510 gate prior to installing it? Moto (Don't Panic!) do the easy stuff first.

Now need to rig up a microphone for on air test before putting it in the box. I've had a blast building this kit. Brings me back to my Heathkit days. Although toroids weren't part of that experience!

Bob K1UTI

424. Another MMR-40 on the air -update

Yahoo group: mmr40owngrp
Date: 2007-10-07 19:50:31 UTC
From: Bob
Topic: 424 Message: 424

Well, after 11 ssb contacts in 8 states, I can definitely say I am pleased. Best dx so far is California during the cal qso party (worked 3 counties). Antenna is an 80m inverted v, apex at 35', feed with 450 ladder line and a tuner. I have also received several unsolicited reports about good audio.

I have not tried making any CW contacts yet but I'm sure that would be no problem.

Bob - K1UTI

425. Oscillator question

Yahoo group: mmr40owngrp
Date: 2007-10-23 02:13:02 UTC
From: Tiana Hall
Topic: 425 Message: 425

I finished soldering my board. I applied power = no smoke. A plus! And I get 5V at U1 and U2. Next I need to find the oscillator signal. I put the antenna from my FT 857 at 3 MHz. I thought I heard something from the FT 857 speaker. but when I tuned around a bit I could duplicate the sound. How do you know you have found the oscillator signal? Also I have FCC-1 Frequency counter kit. Should I quit testing the MMR 40 and put together the FCC-1? The MMR-40 is my first kit so I want to get it working and on the air. I figure out if I'm doing something wrong so I wont make a same mistake in the next rig.

73 and thanks

Tiana KE5ODX

426. Re: [mmr40owngrp] Oscillator question

Yahoo group: mmr40owngrp
Date: 2007-10-23 03:16:09 UTC
From: Steven Weber
Topic: 425 Message: 426

> duplicate the sound. How do you know you have found the oscillator
> signal?

If you put your hand near the oscillator coils and the signal moves, then its coming from the PTO. If it doesn't its coming from someplace esle, maybe a birdie. If you can't find the signal anywhere, then you probably have L2 wound wrong.

>Also I have FCC-1 Frequency counter kit. Should I quit testing
> the MMR 40 and put together the FCC-1?

That might help.
72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

427. Re: [mmr40owngrp] Oscillator question

Yahoo group: mmr40owngrp
Date: 2007-10-23 03:20:36 UTC
From: Bill Linn
Topic: 425 Message: 427

Tiana, using the 857 as you describe, when you think you've found the signal, just unscrew the tuning a bit on the MMR40.. If the signal you are listening to is from the MMR oscillator you will hear it change frequency.

----- Original Message -----
From: "Tiana Hall" <tiana222@...>
To: <mmr40owngrp@yahoogroups.com>
Sent: Monday, October 22, 2007 7:13 PM
Subject: [mmr40owngrp] Oscillator question

>I finished soldering my board. I applied power = no smoke. A plus! And
> I get 5V at U1 and U2. Next I need to find the oscillator signal. I
> put the antenna from my FT 857 at 3 MHz. I thought I heard something
> from the FT 857 speaker. but when I tuned around a bit I could
> duplicate the sound. How do you know you have found the oscillator
> signal? Also I have FCC-1 Frequency counter kit. Should I quit testing
> the MMR 40 and put together the FCC-1? The MMR-40 is my first kit so
> I want to get it working and on the air. I figure out if I'm doing
> something wrong so I wont make a same mistake in the next rig.
>
> 73 and thanks
>
> Tiana KE5ODX
>
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> Yahoo! Groups Links
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> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.488 / Virus Database: 269.15.5/1085 - Release Date:
> 10/22/2007 10:35 AM
>
>

428. Re: [mmr40owngrp] Oscillator question

Yahoo group: mmr40owngrp
Date: 2007-10-23 03:26:31 UTC
From: Bill Linn
Topic: 425 Message: 428

Steve, you and I posted at the same time to this question.

While I have you here, a couple of local guys are building the MMR40 and I'm sitting in as helper, being a previous mmr buillder. The question came up tonight, "How come the cases of crystals 4 and 5 are grounded and not the others?" I don't know, but I'll bet you do?

Bill - W7WEL
----- Original Message -----
From: "Steven Weber" <kd1jv@...>
To: <mmr40owngrp@yahoogroups.com>
Sent: Monday, October 22, 2007 8:16 PM
Subject: Re: [mmr40owngrp] Oscillator question

>> duplicate the sound. How do you know you have found the oscillator
>> signal?
>
> If you put your hand near the oscillator coils and the signal moves, then
> its coming from the PTO. If it doesn't its coming from someplace esle,
> maybe a birdie. If you can't find the signal anywhere, then you probably
> have L2 wound wrong.
>
>>Also I have FCC-1 Frequency counter kit. Should I quit testing
>> the MMR 40 and put together the FCC-1?
>
> That might help.
> 72,
> Steve, KD1JV
> "Melt Solder"
> White Mountains of New Hampshire
> http://kd1jv.qrpradio.com
>
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> Yahoo! Groups Links
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> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.488 / Virus Database: 269.15.5/1085 - Release Date:
> 10/22/2007 10:35 AM

>
>

429. Re: [mmr40owngrp] Oscillator question

Yahoo group: mmr40owngrp
Date: 2007-10-23 14:33:38 UTC
From: Tiana
Topic: 425 Message: 429

Thanks for the advice. I do think I have a problem at L2.? I going to take if off and rewind.? Can I test it in the board without complettely soldering it back in? In some past posts builder talk about adding or removing turns from L1. Do they unsolder then resolder afeter each turn??

Thanks,

?Tiana, KE5ODX

,
maybe a birdie. If you can't find the signal anywhere, then you probably
have L2 wound wrong.

>Also I have FCC-1 Frequency counter kit. Should I quit testing
> the MMR 40 and put together the FCC-1?

That might help.
72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

430. Re: [mmr40owngrp] Oscillator question

Yahoo group: mmr40owngrp
Date: 2007-10-23 14:48:57 UTC
From: Tiana
Topic: 425 Message: 430

Thanks Bill,

Once I rewind L2, I'll definately do this. Last night I was discouraged today I'm excited and ready to give it another go.

Thanks Tiana KE5ODX

Bill said "Tiana, using the 857 as you describe, when you think you've found the signal, just unscrew the tuning a bit on the MMR40.. If the signal you are listening to is from the MMR oscillator you will hear it change frequency."

.

431. Re: [mmr40owngrp] Oscillator question

Yahoo group: mmr40owngrp
Date: 2007-10-24 19:17:16 UTC
From: Bill Linn
Topic: 425 Message: 431

Tiana, getting the oscillator on the correct freq was a real pain when I built my MMR. Removing or adding windings to L1 is no fun because access to the pads has closed in with the addition of L2.

It's easy for me to get confused about the relationship between the final operating frequency and the PTO frequency since lowering the pto frequency results in raising the operating freq. (Less inductance or more capacitance will lower the PTO freq.) .... And vice-versa.

We built the complete oscillator first on one of the MMR's we are working on in our group project and rewound L1 once. It was still off a bit after the rewind. Not wanting to go through the rewind again we decided to adjust the capacitance provided by C8 at a later date. (We'll see how that works out?)

We are also going to add third rangefor complete band coverage by switching a varactor circuit in to provide some additional capacitance. Adding this circuit seemed to change the oscillator's high point setting somewhat as did moving the switch (S2) to the front panel. I also added a frequency counter to mine, which also made a slight change.

So, we aren't too concerned at this point, as long as it's fairly close, and will do our final tweaking after all these mods are in place. I think some small value NPO caps added to the bottom side of the board will work. (I don't want to rework L1 again!)

Good luck and enjoy the project.

Bill - W7WEL

----- Original Message -----
From: Tiana
To: mmr40owngrp@yahoogroups.com
Sent: Tuesday, October 23, 2007 7:48 AM
Subject: Re: [mmr40owngrp] Oscillator question

Thanks Bill,

Once I rewind L2, I'll definately do this. Last night I was discouraged today I'm excited and ready to give it another go.

Thanks Tiana KE5ODX

Bill said "Tiana, using the 857 as you describe, when you think you've found the signal, just unscrew the tuning a bit on the MMR40.. If the signal you are listening to is from the MMR oscillator you will hear it change frequency."

.

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.488 / Virus Database: 269.15.10/1091 - Release Date: 10/24/2007 2:31 PM

432. Re: So where to begin?

Yahoo group: mmr40owngrp
Date: 2007-10-31 01:29:02 UTC
From: k9qb
Topic: 402 Message: 432

Did you set up that 2 amp fuse to protect your rig, hmmm?

That bias setting for the PA is very sensitive...I mean very sensitive!!!

When you install the PA and set out to adjust your bias, it's a real good time to read the instructions closely and abide accordingly.

I apologize if you've done that, but, I just joined this group after completing my mmr40...
From what I've seen just scanning recent posts, there's quite a few people not following the instructions very closely.... and there are a few areas where a close examination of the instructions is quite important.

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "Robert Conley" <kc5wa@...> wrote:
>
> I've just completed the transmitter section. I measured 7.66vdc on my
> DVM. Everything went smoothly. I installed the heat sink for Q10 then
> Q10.
> I was setting up to adjust the power out in the next step. I had my
> Norcal Dummy load attached to measure the vdc on it when I noticed a
> wisp of SMOKE from the 12vdc battery pack I have been using all though
> the build. The springs that hold the batteries were so hot (AA
> batteries also were hot) they were melting into the plastic holder. Up
> to this point every was working just fine.....
> I've measured Q10 Tab to ground..okay no shorts
> Also noted the lack of audio
> Was the TX keyed and pulling to much current?
> I'm stumped need to stop and think........
>

433. New MMR40 builder...

Yahoo group: mmr40owngrp
Date: 2007-10-31 01:46:59 UTC
From: k9qb
Topic: 433 Message: 433

Hello all,

Just joined the group.

Bought my kit at Dayton and finally got around to starting it last Thursday night, not quite a week ago...

Built it in a couple of evenings, checked it out Sunday evening and have been operating it the last 3 evenings...

So far, 10 contacts in about 8 states on the G5RV...This thing works really nice....

It's just sitting out of the box on a notepad to keep from scratching the desktop and I haven't got the mic plugged yet, so, it's only been CW so far...
If it works on SSB anything like it does on CW, it will be a hoot!

Was verrryyy careful on this project and miraculously got it to work first try, yippee.

Had a scare setting up the PTO coil, but, managed to save it from complete destruction...
I think I actually made a bigger deal out of it than it should have been...ah well...

Nice job Steve...and, thanks for a really neat toy...

Mike, WA5PSE

434. Re: [mmr40owngrp] Re: So where to begin?

Yahoo group: mmr40owngrp
Date: 2007-10-31 01:58:28 UTC
From: Ron Genovesi
Topic: 402 Message: 434

Hi Guys
I have the same problem. Everything was fine until I installed Q10 and heatsink. I keep blowing the 2 amp fuse I have in line on my power supply. Got suspicious when my 2 amp bench supply would'nt handle the load. Any suggestions before I start tearing into it?
Ron (N3ETA)
----- Original Message -----
From: k9qb
To: mmr40owngrp@yahoogroups.com
Sent: Tuesday, October 30, 2007 6:29 PM
Subject: [mmr40owngrp] Re: So where to begin?

Did you set up that 2 amp fuse to protect your rig, hmmm?

That bias setting for the PA is very sensitive...I mean very
sensitive!!!

When you install the PA and set out to adjust your bias, it's a real
good time to read the instructions closely and abide accordingly.

I apologize if you've done that, but, I just joined this group after
completing my mmr40...
From what I've seen just scanning recent posts, there's quite a few
people not following the instructions very closely.... and there are a
few areas where a close examination of the instructions is quite
important.

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "Robert Conley" <kc5wa@...> wrote:
>
> I've just completed the transmitter section. I measured 7.66vdc on my
> DVM. Everything went smoothly. I installed the heat sink for Q10 then
> Q10.
> I was setting up to adjust the power out in the next step. I had my
> Norcal Dummy load attached to measure the vdc on it when I noticed a
> wisp of SMOKE from the 12vdc battery pack I have been using all though
> the build. The springs that hold the batteries were so hot (AA
> batteries also were hot) they were melting into the plastic holder. Up
> to this point every was working just fine.....
> I've measured Q10 Tab to ground..okay no shorts
> Also noted the lack of audio
> Was the TX keyed and pulling to much current?
> I'm stumped need to stop and think........
>

435. Re: [mmr40owngrp] Re: So where to begin?

Yahoo group: mmr40owngrp
Date: 2007-10-31 14:46:44 UTC
From: Steven Weber
Topic: 402 Message: 435

> Hi Guys I have the same
>problem. Everything was fine until I installed Q10 and heatsink. I keep
>blowing the 2 amp fuse I have in line on my power supply. Got

Check for a short between the heatsink and tab of Q10. You might need an
insulator between them if the anodizing got nicked.

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

436. Microphone Question

Yahoo group: mmr40owngrp
Date: 2007-11-04 20:04:47 UTC
From: clarkmvimi
Topic: 436 Message: 436

Good morning,
I am been monitoring the list for a while. I just got my MMR40 kit here in the Marshall Islands. By the way everything I have ordered from QrpKits/Doug has arrived here quickly. Amazing, considering most of my mail takes a couple of months.
Anyway down to my question, I am wondering what to use for a microphone. I have a couple of old CB mics around here but I was wondering what the group recomendation might be. Have a great day and thanks for any help you can give.

73
Steve
V73CS/N4TKP
Majuro, Marshall Islands

437. Re: Microphone Question

Yahoo group: mmr40owngrp
Date: 2007-11-04 22:03:50 UTC
From: Garry
Topic: 436 Message: 437

Steve;
I just used a cheap electret mike such a you might use for a computer mike. That is what the circuit is designed for if I remember. You may not get sufficient drive with a condenser mike without a preamp. Now then, having said that I have not made many contacts on SSB but the few I did said the audio sounded fine.

I located a desk style of microphone and wired it though a push contact swtich (from RadioShack). Not much to it.

73

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "clarkmvimi" <clarkmvimi@...> wrote:
>
> Good morning,
> I am been monitoring the list for a while. I just got my MMR40 kit
> here in the Marshall Islands. By the way everything I have ordered
> from QrpKits/Doug has arrived here quickly. Amazing, considering most
> of my mail takes a couple of months.
> Anyway down to my question, I am wondering what to use for a
> microphone. I have a couple of old CB mics around here but I was
> wondering what the group recomendation might be. Have a great day and
> thanks for any help you can give.
>
> 73
> Steve
> V73CS/N4TKP
> Majuro, Marshall Islands
>

438. Re: Microphone Question

Yahoo group: mmr40owngrp
Date: 2007-11-05 01:48:02 UTC
From: sigcom1
Topic: 436 Message: 438

Most CBs use dynamic microphone cartridges. Occasionally you may find an electret cartridge in a CB mic. but more often they're found in land mobile mic's. and, of course, computer mic's.. Don't forget junked telephone answering machines, cordless phones, cell phones, etc.. Look inside and see if the cartridge is a tiny cylinder, typically 1/4" to 3/8" in diameter with a tiny circuit board on the back end where the wires are soldered.

Best of luck with your MMR.

73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "clarkmvimi" <clarkmvimi@...> wrote:
>
> Good morning,
> I am been monitoring the list for a while. I just got my MMR40 kit
> here in the Marshall Islands. By the way everything I have ordered
> from QrpKits/Doug has arrived here quickly. Amazing, considering most
> of my mail takes a couple of months.
> Anyway down to my question, I am wondering what to use for a
> microphone. I have a couple of old CB mics around here but I was
> wondering what the group recomendation might be. Have a great day and
> thanks for any help you can give.
>
> 73
> Steve
> V73CS/N4TKP
> Majuro, Marshall Islands
>

439. Re: Microphone Question

Yahoo group: mmr40owngrp
Date: 2007-11-05 18:18:19 UTC
From: k9qb
Topic: 436 Message: 439

I tried using an old "Realistic" dynamic mic from a cassette recorder
that was thrown away long ago.

For a cheap cassette recorder mic from Radio Shack, this is an older
one from the 70's or 80's, is nicely built, and would have made a
nice companion for the MMR40.

I tried it out with the MMR40 over the weekend, but, could not get
much drive.
I installed a 1 ufd dc blocking cap in it and the dvm shows about 70
to 90 mv out of the mic when I talked into it.
A resistance check of the mic element shows about 180 ohms.

A check of the schematic shows mic audio going through a couple of .1
ufd caps before going straight into the mixer...

Does this mic need some pre-amping to get it to drive or should I be
looking at another problem??...and, would I get anywhere by caving
into buying a condenser mic??

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "Garry" <ve7ajj@...> wrote:
>
> Steve;
> I just used a cheap electret mike such a you might use for a
computer
> mike. That is what the circuit is designed for if I remember. You
> may not get sufficient drive with a condenser mike without a
preamp.
> Now then, having said that I have not made many contacts on SSB but
> the few I did said the audio sounded fine.
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> I located a desk style of microphone and wired it though a push
> contact swtich (from RadioShack). Not much to it.
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> Garry/Ve7ajj
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> > Steve
> > V73CS/N4TKP
> > Majuro, Marshall Islands
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440. Re: Microphone Question

Yahoo group: mmr40owngrp
Date: 2007-11-05 22:45:25 UTC
From: sigcom1
Topic: 436 Message: 440

Mike,

Generally speaking, an un-amplified dynamic mic. cartridge has a lower output level and a lower output impedance than the typical electret capsule mic.., so yes, you would need a pre-amp.. Also be aware that there is a 'bias' voltage on the MMR mic. line which is used to power the FET pre-amp. integral to the electret capsule.

The easiest thing would be to use an electret but don't let that stop you from experimenting!

73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "k9qb" <k9qb@...> wrote:
>
> I tried using an old "Realistic" dynamic mic from a cassette recorder
> that was thrown away long ago.
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> For a cheap cassette recorder mic from Radio Shack, this is an older
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> > > Steve
> > > V73CS/N4TKP
> > > Majuro, Marshall Islands
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441. Re: Microphone Question

Yahoo group: mmr40owngrp
Date: 2007-11-06 10:57:59 UTC
From: k9qb
Topic: 436 Message: 441

Thanks Steve,

I kind of suspected the little mic just didn't have the umph without
the aid of a preamp...

Still it would look good used with the MMR40...

HHowever, I may be able to devise a little preamp that will slip
neatly into the mic body and still "have my cake and eat it" too!

Thanks for the advice Steve...

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "sigcom1" <sigcom@...> wrote:
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> Mike,
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> Generally speaking, an un-amplified dynamic mic. cartridge has a
> lower output level and a lower output impedance than the typical
> electret capsule mic.., so yes, you would need a pre-amp.. Also be
> aware that there is a 'bias' voltage on the MMR mic. line which is
> used to power the FET pre-amp. integral to the electret capsule.
>
> The easiest thing would be to use an electret but don't let that
> stop you from experimenting!
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> 73.......Steve Smith WB6TNL
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> --- In mmr40owngrp@yahoogroups.com, "k9qb" <k9qb@> wrote:
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442. Re: Microphone Question

Yahoo group: mmr40owngrp
Date: 2007-11-08 02:41:14 UTC
From: Garry
Topic: 436 Message: 442

Or you might be able to use the cord and the case and slip a simple
electrec element in the case. a much simpler solution. HI.

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "k9qb" <k9qb@...> wrote:
>
> Thanks Steve,
>
> I kind of suspected the little mic just didn't have the umph without
> the aid of a preamp...
>
> Still it would look good used with the MMR40...
>
> HHowever, I may be able to devise a little preamp that will slip
> neatly into the mic body and still "have my cake and eat it" too!
>
> Thanks for the advice Steve...
>
> Mike, WA5PSE
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> --- In mmr40owngrp@yahoogroups.com, "sigcom1" <sigcom@> wrote:
> >
> > Mike,
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> > Generally speaking, an un-amplified dynamic mic. cartridge has a
> > lower output level and a lower output impedance than the typical
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> > used to power the FET pre-amp. integral to the electret capsule.
> >
> > The easiest thing would be to use an electret but don't let that
> > stop you from experimenting!
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> > 73.......Steve Smith WB6TNL
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> > --- In mmr40owngrp@yahoogroups.com, "k9qb" <k9qb@> wrote:
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> > > I tried using an old "Realistic" dynamic mic from a cassette
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> > > Mike, WA5PSE
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> > > --- In mmr40owngrp@yahoogroups.com, "Garry" <ve7ajj@> wrote:
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>

443. Re: Microphone Question

Yahoo group: mmr40owngrp
Date: 2007-11-08 11:05:18 UTC
From: k9qb
Topic: 436 Message: 443

Interesting idea...if my little one transistor preamp doesn't measure up, that'll be the next move...Mike

--- In mmr40owngrp@yahoogroups.com, "Garry" <ve7ajj@...> wrote:
>
> Or you might be able to use the cord and the case and slip a simple
> electrec element in the case. a much simpler solution. HI.
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> Garry/Ve7ajj
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> --- In mmr40owngrp@yahoogroups.com, "k9qb" <k9qb@> wrote:
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> > Thanks for the advice Steve...
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> > Mike, WA5PSE
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444. Re: Microphone question

Yahoo group: mmr40owngrp
Date: 2007-11-08 13:07:28 UTC
From: Randal
Topic: 444 Message: 444

I think that ou will find an electret element to be the simplest, least costly and perhaps the best solution. I used a salvaged hand held speaker mic and simply re-wired it.

73

445. Re: Microphone question

Yahoo group: mmr40owngrp
Date: 2007-11-08 13:58:33 UTC
From: k9qb
Topic: 444 Message: 445

Now you're talking, Randal,

A speaker mic...
The speaker in the MMR40 kit is pretty much worthless except for cw and with the volume turned wayyy down.

The speaker/mic idea's as good as anything I can think of...

Thanks, Mike

--- In mmr40owngrp@yahoogroups.com, "Randal" <w1in@...> wrote:
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> I think that ou will find an electret element to be the simplest,
> least costly and perhaps the best solution. I used a salvaged hand
> held speaker mic and simply re-wired it.
>
> 73
>

446. Re: Microphone question

Yahoo group: mmr40owngrp
Date: 2007-11-09 05:21:55 UTC
From: Garry
Topic: 444 Message: 446

You are right about the speaker. I used a different case and a much larger speaker and it still leaves something to be desired. My suggestion would be to fit a stereo plug and simply forget the onboard speaker or use the plug to switch it out when you want to use an outboard speaker and jut use the supplied one for any portable ops you might want to do.

I have a homebuilt speaker with an active filter built into the case that I can use but I have yet to add the plug. The active filter works for both CW and SSB and also includes a notch to tune out those inevitable heterodynes..... or nearby stations.....

73

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "k9qb" <k9qb@...> wrote:
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> Now you're talking, Randal,
>
> A speaker mic...
> The speaker in the MMR40 kit is pretty much worthless except for cw
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> > least costly and perhaps the best solution. I used a salvaged hand
> > held speaker mic and simply re-wired it.
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447. Completed MMR-40

Yahoo group: mmr40owngrp
Date: 2007-11-11 00:17:42 UTC
From: taylorn4td
Topic: 447 Message: 447

I have uploaded photos of my completed MMR-40. I used the FFC-1/FFC-2 for the LO. Norcal keyer and gelcell battery are also included. The rig was a fun project and works great.

73,

Taylor, N4TD

448. Re: Completed MMR-40

Yahoo group: mmr40owngrp
Date: 2007-11-11 14:32:22 UTC
From: Bruce Beford
Topic: 447 Message: 448

Thanks for the pix, Taylor. The rig looks great! Nice integration and packaging job. Well done!
73,
Bruce N1RX

449. Re: Completed MMR-40

Yahoo group: mmr40owngrp
Date: 2007-11-12 00:31:08 UTC
From: phaydenlex
Topic: 447 Message: 449

What can I say, Nice Job!!

Pat
KI4QCS

--- In mmr40owngrp@yahoogroups.com, "taylorn4td" <taylorn4td@...> wrote:
>
> I have uploaded photos of my completed MMR-40. I used the FFC-1/FFC-
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> for the LO. Norcal keyer and gelcell battery are also included. The
> rig was a fun project and works great.
>
> 73,
>
> Taylor, N4TD
>

450. Re: Completed MMR-40

Yahoo group: mmr40owngrp
Date: 2007-11-13 08:58:45 UTC
From: ron_ayling
Topic: 447 Message: 450

Excellent job, I have the FCC-1 made up but still not made the FCC-2
yet, how well does the FCC-1/2 work with the MMR-40? does it overcome
the lack of RIT when using the rig on CW as regards the filter?
from Ron..

--- In mmr40owngrp@yahoogroups.com, "taylorn4td" <taylorn4td@...> wrote:
>
> I have uploaded photos of my completed MMR-40. I used the FFC-1/FFC-
2
> for the LO. Norcal keyer and gelcell battery are also included. The
> rig was a fun project and works great.
>
> 73,
>
> Taylor, N4TD
>

451. Photo of MMR-40 with frequency counter fitted

Yahoo group: mmr40owngrp
Date: 2007-11-13 12:52:28 UTC
From: m0xdx
Topic: 451 Message: 451

Hi,
I have posted a photo of my finished MMR-40 with the "FVMaster Frecon"
frequency counter fitted.
This counter fits nicely in the top cover of the supplied case as you
can see.
I've worked quite a few stions on ssb,and I get very good audio reports.
I've increased the received audio dramatically and made a basic audio
agc circuit so strong signals don't deafen me!
I'll post details of these mods later.

73's Paul M0XDX

452. Re: Photo of MMR-40 with frequency counter fitted

Yahoo group: mmr40owngrp
Date: 2007-11-13 18:03:37 UTC
From: k9qb
Topic: 451 Message: 452

Excellent work, Paul...

I really like your front panel treatment.

I've been trying to figure out a more appealing presentation based on
the original, kind of like what you've done...

You've given me more ideas to stir into the mix...

Again...very nice work...

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "m0xdx" <Pdumpleton@...> wrote:
>
> Hi,
> I have posted a photo of my finished MMR-40 with the "FVMaster
Frecon"
> frequency counter fitted.
> This counter fits nicely in the top cover of the supplied case as you
> can see.
> I've worked quite a few stions on ssb,and I get very good audio
reports.
> I've increased the received audio dramatically and made a basic audio
> agc circuit so strong signals don't deafen me!
> I'll post details of these mods later.
>
> 73's Paul M0XDX
>

453. New file uploaded to mmr40owngrp

Yahoo group: mmr40owngrp
Date: 2007-11-14 20:47:36 UTC
From: mmr40owngrp@yahoogroups.com
Topic: 19 Message: 453

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the mmr40owngrp
group.

File : /mmr40 panels.jpg
Uploaded by : m0xdx <Pdumpleton@...>
Description : Alternative front and rear panels

You can access this file at the URL:
http://groups.yahoo.com/group/mmr40owngrp/files/mmr40%20panels.jpg

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/help/us/groups/files

Regards,

m0xdx <Pdumpleton@...>

454. final output question

Yahoo group: mmr40owngrp
Date: 2007-11-20 02:01:19 UTC
From: ab8xg
Topic: 454 Message: 454

I was doing well with all my tests, everything working as described in the instructions until i started adjusting the pa bias and it doesn't change with adjustment. 33ma at idle and 95ma keyed with or without modulation. Not sure what my problem could be but any help would be appreciated.

455. Re: final output question

Yahoo group: mmr40owngrp
Date: 2007-11-20 14:38:27 UTC
From: yq4n
Topic: 454 Message: 455

--- In mmr40owngrp@yahoogroups.com, "ab8xg" <ab8xg@...> wrote:
>
> I was doing well with all my tests, everything working as described
in
> the instructions until i started adjusting the pa bias and it doesn't
> change with adjustment. 33ma at idle and 95ma keyed with or without
> modulation. Not sure what my problem could be but any help would be
> appreciated.
>
Take your ohm meter and check for continuity between the arm of the V#
10k pot and the gate of Q10, the IRF 510A. You should get 100 ohms,
the value of R18. If not, then you may have a cold solder joint on the
gate of Q10, R18, or the V3 pot. You probably should re-heat those
joints and try again.

I just completed building my MMR-40 last week. It is working fine now,
but I did encounter some difficulty in alignment. I briefly covered
that in my review on eHam.

Good luck.

456. Re: final output question

Yahoo group: mmr40owngrp
Date: 2007-11-20 14:41:32 UTC
From: yq4n
Topic: 454 Message: 456

I should have said "the arm of the V3 pot". Incidently I am now
getting about 8 watts ouput on cw at 13.8v input.--- In
mmr40owngrp@yahoogroups.com, "yq4n" <N4QY@...> wrote:
>
> --- In mmr40owngrp@yahoogroups.com, "ab8xg" <ab8xg@> wrote:
> >
> > I was doing well with all my tests, everything working as
described
> in
> > the instructions until i started adjusting the pa bias and it
doesn't
> > change with adjustment. 33ma at idle and 95ma keyed with or
without
> > modulation. Not sure what my problem could be but any help would
be
> > appreciated.
> >
> Take your ohm meter and check for continuity between the arm of the
V⊬
> 10k pot and the gate of Q10, the IRF 510A. You should get 100
ohms,
> the value of R18. If not, then you may have a cold solder joint on
the
> gate of Q10, R18, or the V3 pot. You probably should re-heat those
> joints and try again.
>
> I just completed building my MMR-40 last week. It is working fine
now,
> but I did encounter some difficulty in alignment. I briefly
covered
> that in my review on eHam.
>
> Good luck.
>

457. Re: [mmr40owngrp] final output question

Yahoo group: mmr40owngrp
Date: 2007-11-20 16:13:26 UTC
From: Steven Weber
Topic: 454 Message: 457

> the instructions until i started adjusting the pa bias and it doesn't
> change with adjustment. 33ma at idle and 95ma keyed with or without
> modulation. Not sure what my problem could be but any help would be
> appreciated.
>
Make sure you have 5.1 volts across the zener at the PA bias pot. Maybe you have the diode in backwards? Solder short?

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

458. Highest Voltage you have safely run on the MMR-40

Yahoo group: mmr40owngrp
Date: 2007-11-20 20:43:09 UTC
From: yq4n
Topic: 458 Message: 458

I know the max rating given in the instructions is 14 volts DC, but suspect someone has tested the limits a bit and run more. What is the most you have safely run on it? I have been thinking about maybe running more voltage to the IRF 510 by running it on a separate supply, or by breaking the trace on the voltage line, putting, say a 5.1 v zener, in series with the circuitry other than the final amp, then running the voltage up to about 19 or 20 v DC. Has anyont tried anything like this?

459. Q10 Bias.

Yahoo group: mmr40owngrp
Date: 2007-11-22 04:44:08 UTC
From: huizingajohn
Topic: 459 Message: 459

Low Power out problem.

I removed one winding of L3 on the MMR-40
and the RF out went right to 6 Watts would like to peak up
the TX. Can this be done With Q10 Installed?

What should the Bias Voltage on Q10 be with Key Down.
also can the BFO and CW Tone Be peaked with Q10 Installed.

The Receiver works fine.

Thanks so far for all the good information about the MMR-40
on this site it has save me a lot of time and Headaches
did not realize that the windings on L3 where that critical.

John Huizinga, WD8JMA

460. Re: final output question

Yahoo group: mmr40owngrp
Date: 2007-11-22 08:23:00 UTC
From: Kenny Coen
Topic: 454 Message: 460

--- In mmr40owngrp@yahoogroups.com, "ab8xg" <ab8xg@...> wrote:
>
> I was doing well with all my tests, everything working as described
in
> the instructions until i started adjusting the pa bias and it doesn't
> change with adjustment. 33ma at idle and 95ma keyed with or without
> modulation. Not sure what my problem could be but any help would be
> appreciated.
>
Thanks to everyone who for their help on my final output power
question, it ended up being a poor solder joint on onr lead of L3 once
i got that corrected everything worked great, really looking forward to
getting on the air with it. Thanks again 73 de Kenny

461. Re: [mmr40owngrp] Q10 Bias.

Yahoo group: mmr40owngrp
Date: 2007-11-22 17:16:04 UTC
From: Steven Weber
Topic: 459 Message: 461

> I removed one winding of L3 on the MMR-40
> and the RF out went right to 6 Watts would like to peak up
> the TX. Can this be done With Q10 Installed?
>

Sure, final peaking of the Tx band pass filter is best done watching a watt meter.

> What should the Bias Voltage on Q10 be with Key Down.
> also can the BFO and CW Tone Be peaked with Q10 Installed.
>

The exact voltage is device dependant, so follow the instructions on how to set the bias current into Q10.

> Thanks so far for all the good information about the MMR-40
> on this site it has save me a lot of time and Headaches
> did not realize that the windings on L3 where that critical.
>

Not only are the number of turns very critical, but how the turns are spaced on the core can make a significant difference in power output.

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

462. An other one on the Air.

Yahoo group: mmr40owngrp
Date: 2007-11-26 02:08:02 UTC
From: huizingajohn
Topic: 462 Message: 462

Almost completely done

Did some on the air testing and made a few contacts with PSK
used a Signal Link 1 for the computer interface and MixW for software
Runs at about 6 watts and Q10 does not get that warm
can hold on to the heat sink and not get burned during some of
my longer macro files.

John Huizinga WD8JMA.

463. and yet another 1 on the air

Yahoo group: mmr40owngrp
Date: 2007-11-26 19:19:56 UTC
From: Kenny Coen
Topic: 463 Message: 463

Hi everyone got the kit finished up on friday evening and made 1 contact but still needed some adjustments. Worked on it saturday and installed a cb power mic that i picked up at a truck stop and it seems to work very well, good audio reports, have only gotten to work local stations so far but really looking forward to getting on the air more with it. Great little kit. 73 Kenny

464. Comments on the MMr-40

Yahoo group: mmr40owngrp
Date: 2007-11-27 02:44:10 UTC
From: Garry
Topic: 464 Message: 464

Kudo's to you folks who are just getting your rigs up and running.

I recently added the KD1JV display to my MMR-40. (picture added to my folder) I actually purchased it to use with my Bitx20 but since I haven't bought the Bitx20 kit yet I decided to install it into the MMR-40.

The digital display makes the rig a whole lot more enjoyable to use. I can locate whatever frequency I like whenever I like. In fact I had the rig programmed so I could not possibly get out of band with it and now I have re-adjusted the tuning to cover to the absolute bottom end.

Previously I had not made many attempts to make contacts in SSB mode however I have started checking into the Aurora net (Canadian) on 7.055 in late after noon. Using a power supply that is less than 12 volts I get 2 watts output on that frequency. Most surprising to me is that I can be heard by stations in Alberta (I am on the West coast) under extremely lousy band conditions with a power level somewhat below the rigs full output.

I had to repeat my call but I was still heard and made the check-in.
All I can say is don't underestimate what can be done on 40 meters
with 5 ☐ 8 watts.

I suspect I will retune the radio for better output on that frequency and I am now looking for a schematic for a simple compressor mike preamp to add to the input. If anyone has such a circuit please pass it along.

Garry/Ve7ajj

465. need a high gain antenna design for bitx20 !!!!

Yahoo group: mmr40owngrp
Date: 2007-12-01 07:12:57 UTC
From: shubhamforme
Topic: 465 Message: 465

hello every one....
i had made the bitx20 and made lots of contact in local with it about
1500 to 2000 km ,,, but now i want to make dx qso with my bitx for
which i need a high gain 10 db antenna for 20m......
does any one have any design for making a high gain antenna of 10 to
15db ....
any web site link or pdf file???
ple help me out....
send youre details at -------
shubhamforme@...
regards'
shubham

466. need a high gain antenna design for bitx20 !!!!

Yahoo group: mmr40owngrp
Date: 2007-12-01 07:13:16 UTC
From: shubhamforme
Topic: 465 Message: 466

hello every one....
i had made the bitx20 and made lots of contact in local with it about
1500 to 2000 km ,,, but now i want to make dx qso with my bitx for
which i need a high gain 10 db antenna for 20m......
does any one have any design for making a high gain antenna of 10 to
15db ....
any web site link or pdf file???
ple help me out....
send youre details at shubhamforme@...
regards'
shubham

467. C49

Yahoo group: mmr40owngrp
Date: 2007-12-01 19:33:03 UTC
From: mcmeekin
Topic: 467 Message: 467

On page 6, installation of small capacitors, C46 is listed as (D) ceramic disk. It should be (M) multilayer?

468. Re: C49

Yahoo group: mmr40owngrp
Date: 2007-12-01 19:36:23 UTC
From: mcmeekin
Topic: 467 Message: 468

--- In mmr40owngrp@yahoogroups.com, "mcmeekin" <mcmeekin@...> wrote:
>
> On page 6, installation of small capacitors, C46 is listed as (D)
> ceramic disk. It should be (M) multilayer?
>
Oops, typo. I meant C49 is listed as (D)...

469. installing crystals

Yahoo group: mmr40owngrp
Date: 2007-12-01 22:23:26 UTC
From: mcmeekin
Topic: 469 Message: 469

Page 10 says solder cases of X1-X4 to adjacent solder pads. No solder pad next to X1, only next to X2-X5.

470. Re: installing crystals

Yahoo group: mmr40owngrp
Date: 2007-12-02 06:39:16 UTC
From: yq4n
Topic: 469 Message: 470

--- In mmr40owngrp@yahoogroups.com, "mcmeekin" <mcmeekin@...> wrote:
>
> Page 10 says solder cases of X1-X4 to adjacent solder pads. No solder
> pad next to X1, only next to X2-X5.
>

Hi,

I just built a MMR-40 about a week ago. You are right, and the crystals with the soldering pad are X-2 thru X-5. These crystals should all be soldered to the pad. X1 is the bfo crystal and is not soldered to any pad and there is no pad for it either. Soldering the crystals in the IF filter to the pad (ground) reduces "blow by" in the filter and thereby makes the IF filter more effective. This is not applicable to the crystal in the BFO circuit.

I have been having a ball with my MMR-40. It puts out 8 watts with 13.8 volts input. I have used it on CW only at this point. Have made probably a hundred contacts in the last week or so with it.

If you have any problems aligning the MMR-40, you might benefit from my comments on my eHam review of the MMR-40.

I hope your build goes smoothly.

73

Larry
N4QY

471. Re: installing crystals

Yahoo group: mmr40owngrp
Date: 2007-12-02 12:14:07 UTC
From: mcmeekin
Topic: 469 Message: 471

--- In mmr40owngrp@yahoogroups.com, "yq4n" <N4QY@...> wrote:
>
> --- In mmr40owngrp@yahoogroups.com, "mcmeekin" <mcmeekin@> wrote:
> >
> > Page 10 says solder cases of X1-X4 to adjacent solder pads. No
> solder
> > pad next to X1, only next to X2-X5.
> >
>
>
> Hi,
>
> I just built a MMR-40 about a week ago. You are right, and the
> crystals with the soldering pad are X-2 thru X-5. These crystals
> should all be soldered to the pad. X1 is the bfo crystal and is not
> soldered to any pad and there is no pad for it either. Soldering the
> crystals in the IF filter to the pad (ground) reduces "blow by" in
> the filter and thereby makes the IF filter more effective. This is
> not applicable to the crystal in the BFO circuit.
>
> I have been having a ball with my MMR-40. It puts out 8 watts with
> 13.8 volts input. I have used it on CW only at this point. Have
> made probably a hundred contacts in the last week or so with it.
>
> If you have any problems aligning the MMR-40, you might benefit from
> my comments on my eHam review of the MMR-40.
>
> I hope your build goes smoothly.
>
> 73
>
> Larry
> N4QY
>
Thank you. I had looked on eHam but had somehow missed the MMR-40
reviews. Also thank you for the reassurance on the solder pads.

73,
BOB/k4mut

472. Having a blast on ssb

Yahoo group: mmr40owngrp
Date: 2007-12-04 03:11:12 UTC
From: Kenny Coen
Topic: 472 Message: 472

Made a couple of contacts today out to about 500 miles before the foriegn broadcast wiped things out, still amazed how well this little rig works on 5 or so watts ssb. Had good reports on the audio so the little cb power mic seems to be doing ok.Did add teflon thread tape to the threads on the pto screw and it helped with tuning, making it a little stiffer and less touchey. 73/Kenny

473. MMR-40 in the CW Spartan Sprint Contest

Yahoo group: mmr40owngrp
Date: 2007-12-04 05:41:53 UTC
From: yq4n
Topic: 473 Message: 473

Tonight was the monthly Spartan Sprint contest. During the 2 hours, I worked 26 stations all of whom were using 5 watts or less.I worked 5 Texas stations and one of them was running 3 watts. Worked two from Arizona,& one of them was running 3 watts. Worked a 2 watt station from New Mexico, and an two VE3 with one of them running 3 watts.

Had a blast. My antenna was helpful as I am running a 80 meter Extended Double Zepp at 75 feet.

474. Updated schematic and or PCB layout drawing

Yahoo group: mmr40owngrp
Date: 2007-12-04 08:28:20 UTC
From: Eim
Topic: 474 Message: 474

I am looking for an updated schematic of the MMR-40.

I am also trying to get the PCB layout drwawing of this rig.
This in fomat of gerber or dxf or odb++ or the original design file
from the PCB tool.

Who is able to help me to get these items?

Eim

475. need an assembled & complete bitx or any other 20m transceiver .....

Yahoo group: mmr40owngrp
Date: 2007-12-05 10:46:34 UTC
From: shubhamforme
Topic: 475 Message: 475

need an assembled & complete bitx or any other 20m transceiver .....
---
hello every one....i am new to ham radios and i live in india......
the company made rigs are very costly and are for experts....
almost a month ago i came across the bitx through information at web....
i know that there are kits available of bitx on net,,but my problem is
that i dont have any experience and intruments for building a
transceiver,,,,
so i am eagerly searching for a person who can provide me a bitx20a or
the bitx20 version-3 transceiver with a 100 watt's linear + a digital
frequency counter + a cw tone all fitted in a compact cabinet...

i will pay the desired cost for producing this rig for me.....
so please contact me at --- shubhamforme@...
my mob no for indian's - --- 0-9907249249
and for dx --- 0091-9907249249
regards
shubham

476. Re: need an assembled & complete bitx or any other 20m transceiver .....

Yahoo group: mmr40owngrp
Date: 2007-12-06 05:23:12 UTC
From: Garry
Topic: 475 Message: 476

--- In mmr40owngrp@yahoogroups.com, "shubhamforme" <shubhamforme@...>
wrote:
>
>
> need an assembled & complete bitx or any other 20m transceiver .....
> ---
--
> hello every one....i am new to ham radios and i live in india......
Shubham.

Your request does not seem to be a reasonable request. I think it would be some what less costly for you to purchase a commercially built radio then to have someone build what you are looking for on your behalf. I cannot imagine it being cheaper.

Try Ebay and look at the older used radios. Many of them are excellent performers and would have multipul bands rather then just a single band. Some of the old heathkits are available for between 1 and 2 Hundred dollars and they are good radios with quiet receivers and full 100 watts output. They will also warm your shack while you operate. HI

If nothing else, checking the selling prices on ebay will give you a good idea of the cost of what you want.

73

Garry/Ve7ajj

477. need an assembled or second hand mmr-40....

Yahoo group: mmr40owngrp
Date: 2007-12-06 16:41:53 UTC
From: shubhamforme
Topic: 477 Message: 477

hello every one i need an assembled or second hand mmr-40.....
it should be in working condition...
contact me at- shubhamforme@...

478. new simple universal SSB générator

Yahoo group: mmr40owngrp
Date: 2007-12-09 13:30:56 UTC
From: Mourot Bernard
Topic: 478 Message: 478

Hello everyone,

We built a universal SSB generator in emission and reception
This generator is the SSB generator SSB BINGO very complete with the
BF
on Speakerphone, the modulator microphone, the FI Transmission and
reception, and there are only
2 mixer NE612, also a CAG, only one filter quartz 10,240 Switched LED
IN4148, reversing the 13.8 Volts moving in emission or reception.
This generator SSB operates 2 m to 160m, it is free, it xiste scheme
electronic settlements, photos and printed circuit copper.

This is available on the Group *** BINGO QRP SSB CW *** Yahoo group;
There is also our constructs a transceiver complete 2m and Bingo 80
complete with photos true gold mine. We are a young group of France
builders.

73

F6BCU manager

479. audio spectrogram program

Yahoo group: mmr40owngrp
Date: 2007-12-13 14:53:39 UTC
From: mcmeekin
Topic: 479 Message: 479

```
Message-ID: <fjrh1j+tsi1@...>
User-Agent: eGroups-EW/0.82
MIME-Version: 1.0
Content-Type: text/plain; charset="ISO-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Mailer: Yahoo Groups Message Poster
X-Yahoo-Newman-Property: groups-compose
Sender: notify@yahoogroups.com
X-Yahoo-GPoster: 4NqMYIFRVYt_Omrv

Instructions suggest using an audio spectrogram program to set the
BFO. What software are you using? Anything for linux?
```

480. AGC?

Yahoo group: mmr40owngrp
Date: 2007-12-13 18:06:56 UTC
From: Garry
Topic: 480 Message: 480

A while back I saw a circuit and a rather simple one as I recall for
an Audio derived agc for rigs that had no agc. I can't seem to find
it on the internet. Perhaps I am not using the proper search criteria.

Anyone got a link to such?

TIA

Garry/Ve7ajj

481. Re: AGC?

Yahoo group: mmr40owngrp
Date: 2007-12-13 19:30:14 UTC
From: m0xdx
Topic: 480 Message: 481

--- In mmr40owngrp@yahoogroups.com, "Garry" <ve7ajj@...> wrote:
>
> A while back I saw a circuit and a rather simple one as I recall for
> an Audio derived agc for rigs that had no agc. I can't seem to find
> it on the internet. Perhaps I am not using the proper search criteria.
>
> Anyone got a link to such?
>
> TIA
>
> Garry/Ve7ajj
>
Hi,
I connected a 47uF capacitor across pins 1 and 8 of the audio o/p amp,
which dramatically increase the audio output.Then I used an opto-coupler
(led/ldr type)with the led in series with a 1N4148 diode, this then
connected directly across the speaker.The ldr side of the opto coupler
was connected in series with a 22K resistor directly across R16.
When a loud signal appears the led lights,so the resistance of the ldr
decreases,and lowers the gain of u8a.
This works very well, limitng the volume on loud signals,but works
better with higher impedance speakers.
Regards,Paul M0XDX

482. Re: AGC?

Yahoo group: mmr40owngrp
Date: 2007-12-14 02:11:48 UTC
From: Garry
Topic: 480 Message: 482

Thanks Paul.

That sounds like a very interesting approach. I will certainly look into it.

73

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "m0xdx" <Pdumpleton@...> wrote:
>
> --- In mmr40owngrp@yahoogroups.com, "Garry" <ve7ajj@> wrote:
> >
> > A while back I saw a circuit and a rather simple one as I recall for
> > an Audio derived agc for rigs that had no agc. I can't seem to find
> > it on the internet. Perhaps I am not using the proper search criteria.
> >
> > Anyone got a link to such?
> >
> > TIA
> >
> > Garry/Ve7ajj
> >
> Hi,
> I connected a 47uF capacitor across pins 1 and 8 of the audio o/p amp,
> which dramatically increase the audio output.Then I used an opto-coupler
> (led/ldr type)with the led in series with a 1N4148 diode, this then
> connected directly across the speaker.The ldr side of the opto coupler
> was connected in series with a 22K resistor directly across R16.
> When a loud signal appears the led lights,so the resistance of the ldr
> decreases,and lowers the gain of u8a.
> This works very well, limitng the volume on loud signals,but works
> better with higher impedance speakers.
> Regards,Paul M0XDX
>

483. New file uploaded to mmr40owngrp

Yahoo group: mmr40owngrp
Date: 2007-12-14 12:00:17 UTC
From: mmr40owngrp@yahoogroups.com
Topic: 19 Message: 483

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the mmr40owngrp
group.

File : /mmr40 agc.jpg
Uploaded by : m0xdx <Pdumpleton@...>
Description : MMR-40 avc circuit

You can access this file at the URL:
http://groups.yahoo.com/group/mmr40owngrp/files/mmr40%20agc.jpg

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

m0xdx <Pdumpleton@...>

484. reception attenation need

Yahoo group: mmr40owngrp
Date: 2008-01-06 07:12:06 UTC
From: f5lct
Topic: 484 Message: 484

Bonjour to all ,
So i have receive it and monted id , i think the receiver need a gain control on the day no probleme but in europe on the night when the broadcast/noise begin , it's so bad to decode ham on the hear, is there any one have made an attenuation to the receiver, i think to put a gain control in the entrance of T1 . the output of Q2/Q3 in the meedle of a Potentiometer(somethink like 5 K or 1k i dont know any idea??) and the Extremity to the upper side of R3 and the upper side of T1 . how do you think about it ?????

regards happy new year

Hubert F5LCT

485. Re: reception attenation need

Yahoo group: mmr40owngrp
Date: 2008-01-06 20:02:47 UTC
From: sigcom1
Topic: 484 Message: 485

Hello Hubert,

I was wondering how EU op's. using the MMR-40 would cope with overload
from the SWBC stations. Now I know.

I would try exactly what you described using a 1K pot. I hope there
is enough gain so that you can hear something when the signal has been
reduced to the point that U6 is no longer overloaded.

Best of luck to you.

73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "f5lct" <f5lct@...> wrote:
>
> Bonjour to all ,
> So i have receive it and monted id , i think the receiver need a gain
> control on the day no probleme but in europe on the night when the
> broadcast/noise begin , it's so bad to decode ham on the hear, is
> there any one have made an attenuation to the receiver, i think to
put
> a gain control in the entrance of T1 . the output of Q2/Q3 in the
> meedle of a Potentiometer(somethink like 5 K or 1k i dont know any
> idea??) and the Extremity to the upper side of R3 and the upper side
> of T1 . how do you think about it ?????
>
> regards happy new year
>
> Hubert F5LCT
>

486. need a qrp 20m cw transceiver to buy

Yahoo group: mmr40owngrp
Date: 2008-01-15 03:27:39 UTC
From: shubhamforme
Topic: 486 Message: 486

hello every1 i need a cw transceiver for 20m i.e 14mhz or even more if
available ......
it could be of any brand or even home brewed but working.....
it could be from 1to 50 watts.............
if any 1 has a cw transceiver to sell then i am there to purchase
it....
thanks
shubham tiwari.......
contact--
shubhamforme@...

487. need an mmr 40 to buy

Yahoo group: mmr40owngrp
Date: 2008-01-15 03:30:14 UTC
From: shubhamforme
Topic: 487 Message: 487

hello every1 i need a mmr40 transceiver assembled....
it could also have a digital readout...
if any 1 has a mmr40 transceiver to sell then i am there to purchase
it....
thanks
shubham tiwari.......
contact--
shubhamforme@hotmail.com

488. Re: [mmr40owngrp] need an mmr 40 to buy

Yahoo group: mmr40owngrp
Date: 2008-01-15 14:22:55 UTC
From: Dick
Topic: 487 Message: 488
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

489. Re: [mmr40owngrp] need an mmr 40 to buy

Yahoo group: mmr40owngrp
Date: 2008-01-15 15:36:33 UTC
From: shubham tiwari
Topic: 487 Message: 489

hi there,,,, i am searching this mmr40 for my teacher mr.jayu bhide [vu3jau] from gwalior , india......

Dick <frenchyx2@...> wrote: Tiwari, what is your call sign..??

On Jan 14, 2008 7:30 PM, shubhamforme <shubhamforme@...> wrote:
hello every1 i need a mmr40 transceiver assembled....
it could also have a digital readout...
if any 1 has a mmr40 transceiver to sell then i am there to purchase it....
thanks
shubham tiwari.......
contact--
shubhamforme@...

SHUBHAM
TIWARI

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

490. One more mmr40 on the air

Yahoo group: mmr40owngrp
Date: 2008-01-20 18:18:00 UTC
From: f5lct
Topic: 490 Message: 490

Bonjour, so i have finish my mmr 40 and it work's nice some qso this
week cu2dx , ha contest, ta4cs,....
nice job with it i'm waiting for the dds fcc2 , but the pto system is
very stable nice....
so regards hope one morning one qso with some north america mmr40 user

regards,
F5LCT
Hubert

491. Digital Dial Kit

Yahoo group: mmr40owngrp
Date: 2008-02-06 20:31:06 UTC
From: sigcom1
Topic: 491 Message: 491

For you guys (and gals) who have been looking for an inexpensive digital dial for your MMR, here you go:

(Following was an e-mail sent to QRP-L from Doug Hendricks)

"I am pleased to announce that the popular KD1JV Digital Dial is now available from Hendricks QRP Kits. You can get the full details, plus take a look at the manual by going to wwww.qrpkits.com. This is an excellent low cost way to add a digital to your latest kit!! 72, Doug"

Send your questions to Doug, I have little experience with this kit other than to say the orignal Steve Weber dial kit works quite well.

73.......Steve Smith WB6TNL

492. Re: Digital Dial Kit

Yahoo group: mmr40owngrp
Date: 2008-02-07 19:38:25 UTC
From: Garry
Topic: 491 Message: 492

And I might add that having the digital readout to know just where in the band you are made using the rig much more enjoyable for me. Easy to build, inexpensive and a breeze to hook up. What more could one want?

72

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "sigcom1" <sigcom@...> wrote:
>
> For you guys (and gals) who have been looking for an inexpensive
> digital dial for your MMR, here you go:
>
> (Following was an e-mail sent to QRP-L from Doug Hendricks)
>
> "I am pleased to announce that the popular KD1JV Digital Dial is now
> available from Hendricks QRP Kits. You can get the full details,
plus
> take a look at the manual by going to wwww.qrpkits.com. This is an
> excellent low cost way to add a digital to your latest kit!! 72,
Doug"
>
> Send your questions to Doug, I have little experience with this kit
> other than to say the orignal Steve Weber dial kit works quite well.
>
> 73.......Steve Smith WB6TNL
>

493. need a hf transceiver!!!!!

Yahoo group: mmr40owngrp
Date: 2008-02-10 18:58:23 UTC
From: shubhamforme
Topic: 493 Message: 493

hello everyone ....
i am from india and i want a hf transceiver which has a 20m or 14mhz
band or even more will do,,,,any brand and any model is accepted ,
even if its a qrp transceiver or home brewed...........

if any 1 intrested in selling then please contact me.......
i am in a desperate need of a hf transceiver.....
regards
shubham tiwari
contact---
shubhamforme@...

494. mmr-40

Yahoo group: mmr40owngrp
Date: 2008-02-11 16:59:52 UTC
From: kengwhite@juno.com
Topic: 494 Message: 494

help
old age is getting in the way of getting my mmr-40 working.
can anyone tell who will fix this thing and get it working.
Sure would appreciate it...
73s
ken
w6vmo

_____
Victim of medical malpractice? Click here to find an expert lawyer to help pursue your case.
http://thirdpartyoffers.juno.com/TGL2121/fc/Ioyw6i3oJJRhwzvPuwkW9JVcygqAmpvBA6scWZ87PPnIdjKX3wDfpv/

495. Re: need a hf transceiver /Need Lic.!!!!!

Yahoo group: mmr40owngrp
Date: 2008-02-11 18:28:55 UTC
From: phaydenlex
Topic: 493 Message: 495

Do you have a Lic? As without a ham Lic. no one is going to sell you
a transceiver.

KI4QCS

--- In mmr40owngrp@yahoogroups.com, "shubhamforme" <shubhamforme@...>
wrote:
>
> hello everyone ....
> i am from india and i want a hf transceiver which has a 20m or 14mhz
> band or even more will do,,,,any brand and any model is accepted ,
> even if its a qrp transceiver or home brewed...........
>
> if any 1 intrested in selling then please contact me.......
> i am in a desperate need of a hf transceiver.....
> regards
> shubham tiwari
> contact---
> shubhamforme@
>

496. Re: [mmr40owngrp] Re: need a hf transceiver /Need Lic.!!!!!

Yahoo group: mmr40owngrp
Date: 2008-02-11 18:56:23 UTC
From: Dick
Topic: 493 Message: 496
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

497. Re: [mmr40owngrp] mmr-40

Yahoo group: mmr40owngrp
Date: 2008-02-11 22:24:20 UTC
From: Steven Weber
Topic: 494 Message: 497

>old age is getting in the way of getting my mmr-40 working.
>can anyone tell who will fix this thing and get it working.
>Sure would appreciate it...

I can, but it will cost you $20.00 and return postage.

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

498. Re: [mmr40owngrp] mmr-40

Yahoo group: mmr40owngrp
Date: 2008-02-13 16:46:20 UTC
From: kengwhite@juno.com
Topic: 494 Message: 498

hi Steve:
glad to hear from you, been looking for awhile...
Can I send you your fee via pay-pal? I will also enclose $5.00 for postage, which ought to cover it, I hope, if not let me know and Ill
get what necessary to you...
Now I have to figure out how to pack this little guy so it doesnt get smashed...
Do I send it to the address on your web page?
Thanks again & 73s
ken white
w6vmo

_____
Click for a credit repair consultation, raise your FICO score.
http://thirdpartyoffers.juno.com/TGL2121/fc/Ioyw6i3m2LaOf2MCz2nn3Dzsx9nPUwOYBBkTrHayKXUUeQzIkMkuhL/

499. Steve and MMR40 Declared a winner by ARRL

Yahoo group: mmr40owngrp
Date: 2008-02-22 18:10:19 UTC
From: Randal
Topic: 499 Message: 499

The lab boys at ARRL have announced a fact that we have known all along.

See ARRL announcement of the winners of the Home Brew Challenge.

http://www.arrl.org/news/stories/2008/02/22/100/?nc=1

Congrats Steve!

500. Re: Steve and MMR40 Declared a winner by ARRL

Yahoo group: mmr40owngrp
Date: 2008-02-22 21:40:51 UTC
From: f5lct
Topic: 499 Message: 500

--- In mmr40owngrp@yahoogroups.com, "Randal" <w1in@...> wrote:
>
> The lab boys at ARRL have announced a fact that we have known all along.
>
> See ARRL announcement of the winners of the Home Brew Challenge.
>
> http://www.arrl.org/news/stories/2008/02/22/100/?nc=1
>
> Congrats Steve!
>
super compliment Steve nice job with nice tx
regards
Hubert
F5LCT

501. need a mmr 40 !!!! to purchase !!!! second hand !!!!

Yahoo group: mmr40owngrp
Date: 2008-02-25 14:20:03 UTC
From: shubhamforme
Topic: 501 Message: 501

hell every one,, i want to purchase a second hand assembled mmr40,,,
if any one intrested in selling his or her mmr 40 then ,, i am there
to purchase it.....
thanks
shubham tiwari
contact-----
shubhamforme-AT-yahoo.com {remove-&AT by@ }

502. vp6dx with the mmr40

Yahoo group: mmr40owngrp
Date: 2008-02-27 07:39:24 UTC
From: f5lct
Topic: 502 Message: 502

Today i have doing vp6dx on ssb with the nice mmr40
it's a good tx/rx
regards
Hubert
in94ps <=> cg75oh 14500 KM with 5 watt !!!!!

503. Re: vp6dx with the mmr40

Yahoo group: mmr40owngrp
Date: 2008-02-28 02:49:50 UTC
From: sigcom1
Topic: 502 Message: 503

Congratulations, Hubert! That is very good DX! I would venture to
say that it is probably a record for the MMR-40.

73.......Steve Smith WB6TNL

--- In mmr40owngrp@yahoogroups.com, "f5lct" <f5lct@...> wrote:
>
> Today i have doing vp6dx on ssb with the nice mmr40
> it's a good tx/rx
> regards
> Hubert
> in94ps <=> cg75oh 14500 KM with 5 watt !!!!!
>

504. strange receive problem

Yahoo group: mmr40owngrp
Date: 2008-02-28 04:11:53 UTC
From: ve3sjb
Topic: 504 Message: 504

Hey everyone.

Well, my MMR-40 project is a back and fourth thing for me lately. Work and school give me next to no time to play. But, im happy to say that my MMR-40 is on the air.... that is with a few reception problems! So ill explain the problem with the best detail I can, and what I have tried to do to solve it. Im at the point, where picking a few other people's brains might help.

So, first off. She receives 100%. Yeah, i know off enough. But here is the catch. When I plug in anything, mic, key, power cable, coax.... sometimes i can hear the receiver drop in volume, quite noticeably. I could hear a weak station, plug something in, or for that fact, give the case a 'love tap' and the station is gone and the noise floor drops, receiver volume drops and station is gone if not barely copy. Now, i could have a station thats 59, big power house just pushing the little speaker to the max at say 1/4 volume on the dial. and just push on the board, or move it, and the audio drops, and i have to run up the volume to 100% to copy again and yeah. TX is fine. when i took a toothpick and poked around on the board. i can hear the audio click in and out. the audio doest disappear, but quiets... like putting an attenuator in line with the receive. but if i keep poking, warping the board. it will come back. so. since i can still hear audio when its 'muting' i believe its a ground issue with something, i have re flowed all the solder joints, looked at them under a good magnifier. poked, prodded and thrown it on my scope even. ANY ideas?

its driving me nuts. completely nuts. help, please!

thanks,

Stephan VE3SJB

505. RE: [mmr40owngrp] strange receive problem

Yahoo group: mmr40owngrp
Date: 2008-02-28 13:18:28 UTC
From: fhump@milwpc.com
Topic: 504 Message: 505

Hi Stephan
Just some thoughts on your problem. From your description sure sounds like something loose. Possible way to trouble shoot it would be to put a know signal in and trace the audio with the scope. Might be able to find were it is lost. Over the years I have had broken leads on components, cracked circuit board leads and component failures that act like that. That might be why I have less hair then when I was younger :) :). Don't forget to check the speaker it self I have forgot easy things like that more then once.

I'm thinking of things as I write so there is no order to these thoughts. Another thing to check is power connections and levels.

Just some thoughts
Frank
KA9FZR
>
>
>---- Original Message ----
>From: ve3sjb@ve3sjb.com
>To: mmr40owngrp@yahoogroups.com
>Subject: RE: [mmr40owngrp] strange receive problem
>Date: Thu, 28 Feb 2008 04:11:53 -0000
>
>>Hey everyone.
>>
>>Well, my MMR-40 project is a back and fourth thing for me lately.
>Work
>>and school give me next to no time to play. But, im happy to say
>that
>>my MMR-40 is on the air.... that is with a few reception problems!
>So
>>ill explain the problem with the best detail I can, and what I have
>>tried to do to solve it. Im at the point, where picking a few other
>>people's brains might help.
>>
>>So, first off. She receives 100%. Yeah, i know off enough. But here
>is
>>the catch. When I plug in anything, mic, key, power cable, coax....
>>sometimes i can hear the receiver drop in volume, quite noticeably.
>I
>>could hear a weak station, plug something in, or for that fact, give
>>the case a 'love tap' and the station is gone and the noise floor
>>drops, receiver volume drops and station is gone if not barely copy.
>>Now, i could have a station thats 59, big power house just pushing

>the
>>little speaker to the max at say 1/4 volume on the dial. and just
>push
>>on the board, or move it, and the audio drops, and i have to run up
>>the volume to 100% to copy again and yeah. TX is fine. when i took a
>>toothpick and poked around on the board. i can hear the audio click
>in
>>and out. the audio doest disappear, but quiets... like putting an
>>attenuator in line with the receive. but if i keep poking, warping
>the
>>board. it will come back. so. since i can still hear audio when its
>>'muting' i believe its a ground issue with something, i have re
>flowed
>>all the solder joints, looked at them under a good magnifier. poked,
>>prodded and thrown it on my scope even. ANY ideas?
>>
>>its driving me nuts. completely nuts. help, please!
>>
>>thanks,
>>
>>Stephan VE3SJB
>>
>>

506. Re: [mmr40owngrp] strange receive problem

Yahoo group: mmr40owngrp
Date: 2008-02-28 18:44:37 UTC
From: Steven Weber
Topic: 504 Message: 506

> its driving me nuts. completely nuts. help, please!
>
Yeap, intermitents can turn you gray in a hurry! I often find the problem on the compete opposite side of the board from where it seems most sensitive to tapping or banging.

Since you have already gone over all the solder joints, its likely the problem isn't there or one is missing. Try reseating the socketed ICs. Also, look between the legs of Q11. Sometimes when you push the leads into the holes, it will shave a thin layer of the lead plating off and this could be causing an intermitent short between legs.

If at all possible, try to figure out if your loosing the signal in the audio stages or at the RF input.

Good luck!

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

507. Re: strange receive problem

Yahoo group: mmr40owngrp
Date: 2008-03-05 23:42:10 UTC
From: ve3sjb
Topic: 504 Message: 507

well, im going to review everything in the circuit and then poke/prod the board here and there. I believe it may be in the AF section, from what i have been playing with. Ill post what the issue is when I get everything resolved. Thanks for the replys guys, ill be putting them to use tonight.

73 de VE3SJB

508. Where on schematic pg. 21 are D5, R43, R44, C74, C75

Yahoo group: mmr40owngrp
Date: 2008-03-09 18:56:47 UTC
From: dagmine
Topic: 508 Message: 508

Can anyone point out where on the schematic on page 21 the following are? D5, R43, R44, C74, C75

dagmine

509. Re: [mmr40owngrp] Where on schematic pg. 21 are D5, R43, R44, C74, C75

Yahoo group: mmr40owngrp
Date: 2008-03-09 19:35:52 UTC
From: Steven Weber
Topic: 508 Message: 509

> Can anyone point out where on the
>schematic on page 21 the following
> are? D5, R43, R44, C74, C75
>
They aren't. These parts are for the diode probe and technically are not
part of the rig as such. They are just used for testing and they won't fit
on the schematic page.
72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
http://kd1jv.qrpradio.com

510. Ordered my MMR40 today.

Yahoo group: mmr40owngrp
Date: 2008-04-07 20:25:25 UTC
From: terwin7707
Topic: 510 Message: 510

Greetings to everyone. My name is Tom and the call is WD9GON. I just ordered my mmr40 today. I have been reading some of the posts and looking over some of the pictures of finished units. I'm looking forward to building mine and to share my experiences building it. Any advise would be welcome and looking to make some mmr40 contacts.

73's Tom

511. Re: Ordered my MMR40 today.

Yahoo group: mmr40owngrp
Date: 2008-04-10 05:18:13 UTC
From: Garry
Topic: 510 Message: 511

Hello Tom..

Welcome to the MMR-40. It's a fun little rig. The build goes quite easy but I would recommend that you follow the advice given in the postings somewhere and start your build with the PTO and the vfo and then test at that point for proper VFO operation and frequencies. It could help in the event that the windings on the toroid are incorrect. It's been a while since I built mine so I can't just recall what the issues might be but I followed that suggestion and all went smoothly with no problems.

Best of luck and enjoy the build and the radio.

73

Garry/Ve7ajj

--- In mmr40owngrp@yahoogroups.com, "terwin7707" <terwin7707@...> wrote:
>
> Greetings to everyone. My name is Tom and the call is WD9GON. I just
> ordered my mmr40 today. I have been reading some of the posts and
> looking over some of the pictures of finished units. I'm looking
> forward to building mine and to share my experiences building it.
> Any advise would be welcome and looking to make some mmr40 contacts.
>
> 73's Tom
>

512. Re: Ordered my MMR40 today.

Yahoo group: mmr40owngrp
Date: 2008-04-10 18:01:42 UTC
From: richqrp
Topic: 510 Message: 512

--- In mmr40owngrp@yahoogroups.com, "terwin7707" <terwin7707@...> wrote:
>
> Greetings to everyone. My name is Tom and the call is WD9GON. I
just
> ordered my mmr40 today. I have been reading some of the posts and
> looking over some of the pictures of finished units. I'm looking
> forward to building mine and to share my experiences building it.
> Any advise would be welcome and looking to make some mmr40 contacts.
>
> 73's Tom
>
Tom i have had mine in the box for one year. the kids took off one
weekend and i opened the box and started. it went together very nice.
i just took my time and double checked all parts and then placed them.
from the start of testing, all specs were right where they were to be.
very nice kit and very nice instructions.. good luck.. Rich wd6fdd

513. Thanks for the information.

Yahoo group: mmr40owngrp
Date: 2008-04-11 13:45:55 UTC
From: terwin7707
Topic: 513 Message: 513

When I get mine I plan to upload my progress as I build it. I also noticed that some have been modified with a digital read out. Just wondering if I should make plans to do that? How has it worked out? I can see it would be nice to have such modification. Anyway, I'm back in town now and getting the old soldering iron cleaned up for some action.

73's
Tom WD9GON

514. RE: [mmr40owngrp] Thanks for the information.

Yahoo group: mmr40owngrp
Date: 2008-04-11 17:01:02 UTC
From: fhump@milwpc.com
Topic: 513 Message: 514

Tom
With mine I just added a Hendricks digital dial by building the digital dial in a Altoids box with a 9 v battery. I just plug the dial into a added mini sound plug connected to a vfo pad on the board. The digital dial can be set up to subtract the vfo from the bfo and you have a nice little add on.

The digital dial is surface mount components. It was my first kit like that but it worked first time so it can be done.

Frank
KA9FZR

---- Original Message ----
From: terwin7707@...
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Thanks for the information.
Date: Fri, 11 Apr 2008 13:45:55 -0000

>When I get mine I plan to upload my progress as I build it. I also
>noticed that some have been modified with a digital read out. Just
>wondering if I should make plans to do that? How has it worked out?
>I can see it would be nice to have such modification. Anyway,
>I'm back in town now and getting the old soldering iron cleaned up
>for
>some action.
>
>73's
>Tom WD9GON
>

515. Digital Dial up snd running

Yahoo group: mmr40owngrp
Date: 2008-04-20 16:17:16 UTC
From: terwin7707
Topic: 515 Message: 515

Greeting to all,

I got my MMR-40 and my Digital Dial kit Saturday. As I looked over the kits I selected the digital dial to build first. I have built some surface mount things in the past, however, they must be either making the stuff smaller or ole' Tom needs new glasses again. I think it's the glasses.
Anyway, after laying out all the items it went together rather fast and only had to check a few items to make sure that I had the right thing.
I uploaded a few pictures of the completed digital dial in the "Photos" area. I'm thinking about mounting it in a seperate box to use with a number of other qrp radios or projects. Not sure which way to go yet. Anyone have any feeling about this after they built it?
As I start work on the mmr-40 I will post my progress. Looks like the soldering iron will be hot for a few weeks.

73's
Tom

516. RE: [mmr40owngrp] Digital Dial up snd running

Yahoo group: mmr40owngrp
Date: 2008-04-20 17:08:38 UTC
From: fhump@milwpc.com
Topic: 515 Message: 516

I just did the digital dial a few weeks ago mounted it in a Altoids box with a nine volt battery and added a off and on switch. put a mini phone jack on the Altoids box and mmr-40 real happy with it that way. Its nice to have a read out of what freq your on.
Frank
KA9FZR

---- Original Message ----
From: terwin7707@...
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Digital Dial up snd running
Date: Sun, 20 Apr 2008 16:17:16 -0000

>Greeting to all,
>
>I got my MMR-40 and my Digital Dial kit Saturday. As I looked over
>the kits I selected the digital dial to build first. I have built
>some
>surface mount things in the past, however, they must be either making
>the stuff smaller or ole' Tom needs new glasses again. I think it's
>the glasses.
>Anyway, after laying out all the items it went together rather fast
>and only had to check a few items to make sure that I had the right
>thing.
>I uploaded a few pictures of the completed digital dial in the
>"Photos" area. I'm thinking about mounting it in a seperate box to
>use
>with a number of other qrp radios or projects. Not sure which way to
>go yet. Anyone have any feeling about this after they built it?
>As I start work on the mmr-40 I will post my progress. Looks like the
>soldering iron will be hot for a few weeks.
>
>
>73's
>Tom
>

517. 1600 Miles per Watt

Yahoo group: mmr40owngrp
Date: 2008-04-27 18:02:50 UTC
From: Paul Jorgenson
Topic: 517 Message: 517

My MMR40 is performing quite well. In the last two weeks I have worked 12 states (including KH6), VE, HP, and now VK, from my Phoenix AZ QTH. At a solid 5 watts out on SSB, my contact with VK2RO is the best to date at a distance of 8144 miles. That makes over 1600 miles per watt on SSB with a simple dipole at 15 feet. Life can only get better when I get an antenna higher in the air!

KE7HR
Paul in Phoenix

518. OT: Unicounter site?

Yahoo group: mmr40owngrp
Date: 2008-04-27 19:06:55 UTC
From: JShroomy
Topic: 518 Message: 518

Could someone forward me, or post a current site that has the information for the unicounter? I searched around and was unable to find a good schematic and pic firmware.

Thanks in advance!

Jim Shrum
AB9LM

519. Re: [mmr40owngrp] 1600 Miles per Watt

Yahoo group: mmr40owngrp
Date: 2008-04-27 19:35:40 UTC
From: warren conklin
Topic: 517 Message: 519

Thats great Paul?

I really like 40m when its in. I have a GAP Titan. Fairly noisy Antenna, but it gets our really good when noise is down. 5 years ago I got up in the middle of the nite, couldnt sleep, turned on the Wilderness SST 40m and worked a fellow in ZL land. He gave me a 449 . The impressive thing though is to do that on 40m ssb. I am really looking foreward to getting this radio running right so I can go onto the mmr40, setting in the bag on the floor. Ive been looking at magnetic loops for qrp rigs, and they get very close to approaching the gain of a dipole, and for portable use that seems very good proposition, because we go camping a fair amount. Where we go camping basically many dead zones, for getting out. No cell service, and very seldom get vhf or uhf out, unless we drive to a ridge. The wife and I went up the ST Joe River camping 4yrs ago in november. the SST was hooked up to an old bandmaster all band mobile verticle. I used it for a couple hours and made some contacts mostly near Seattle I did that during the daytime so skip was short. The loop would be physicall small, so I could put it on a rotator at home, or hang it in a tree camping. I had a Delta loop for 40 m long time ago, and it was a very quiet antenna. It was a full wave and was a real "whopper" with an apex at 52 ft. The one id like to build uses the 1/2 inch copper tube with a 4ft diameter. I guess bonding all the joints and having a very efficient tuning capacitor is critical. A person could put a small gear motor to adjust the loading on the antenna, as it is said to have a very narrow band width with that efficiency. Then maybe a speech processor . I know your thinking, Warren lets just get this one runnig first.
I did remove the final, and tweaked out the passband very nicely This afternoon Im going to try get it running prperly. I read lots of articles,even suggesting putting a ferrite bead on the gate of the final, aids in stability and articles on conduction of zener diodes. Im going to start working on it this afternoon. Ill let you know how things are going.
I appreciate the encouraging news about the ssb dx contacts,
Thanks
Warren
----- Original Message -----
From: Paul Jorgenson
To: mmr40owngrp@yahoogroups.com
Sent: Sunday, April 27, 2008 11:02 AM
Subject: [mmr40owngrp] 1600 Miles per Watt

My MMR40 is performing quite well. In the last two weeks I have worked
12 states (including KH6), VE, HP, and now VK, from my Phoenix AZ QTH.
At a solid 5 watts out on SSB, my contact with VK2RO is the best to
date at a distance of 8144 miles. That makes over 1600 miles per watt
on SSB with a simple dipole at 15 feet. Life can only get better when
I get an antenna higher in the air!

KE7HR
Paul in Phoenix

520. Re: OT: Unicounter site?

Yahoo group: mmr40owngrp
Date: 2008-04-28 00:34:07 UTC
From: JShroomy
Topic: 518 Message: 520

Ok, well I found the source code in the QST binaries, but unable to find a schematic.

--- In mmr40owngrp@yahoogroups.com, "JShroomy" <jshroomy@...> wrote:
>
> Could someone forward me, or post a current site that has the
> information for the unicounter? I searched around and was unable to
> find a good schematic and pic firmware.
>
> Thanks in advance!
>
> Jim Shrum
> AB9LM
>

521. Re: OT: Unicounter site?

Yahoo group: mmr40owngrp
Date: 2008-04-28 17:51:40 UTC
From: Bruce Beford
Topic: 518 Message: 521

--- In mmr40owngrp@yahoogroups.com, "JShroomy" <jshroomy@...> wrote:
>
> Ok, well I found the source code in the QST binaries, but unable to
> find a schematic.
>
> --- In mmr40owngrp@yahoogroups.com, "JShroomy" <jshroomy@> wrote:
> >
> > Could someone forward me, or post a current site that has the
> > information for the unicounter? I searched around and was unable to
> > find a good schematic and pic firmware.
> >
> > Thanks in advance!
> >
> > Jim Shrum
> > AB9LM
> >
>

I sent a copy of this article directly to Jim.
73,
Bruce N1RX

522. Re: OT: Unicounter site?

Yahoo group: mmr40owngrp
Date: 2008-04-30 18:57:25 UTC
From: Paul Jorgenson
Topic: 518 Message: 522

The article is available at:
http://www.hellocq.net/forum/attachment.php?attachmentid=49928

KE7HR Paul

--- In mmr40owngrp@yahoogroups.com, "JShroomy" <jshroomy@...> wrote:
>
> Could someone forward me, or post a current site that has the
> information for the unicounter? I searched around and was unable to
> find a good schematic and pic firmware.
>
> Thanks in advance!
>
> Jim Shrum
> AB9LM
>

523. Tuning mod for SSB

Yahoo group: mmr40owngrp
Date: 2008-05-02 00:06:49 UTC
From: Paul Jorgenson
Topic: 523 Message: 523

Since most of my operation is SSB, I wanted a more convienient way of sending RF out for antenna tuning. I added a switch to short the mic, just as if it were a mono plug in the jack for cw. With the switch activated, the PTT on the mic acts like a cw key and full RF output is available for tuning. Opening the switch allows normal SSB operation. This is more convienient than trying to pull the plug out part of the way or having to unplug the mic and use a shorted mono plug for tuning. I will put a picture in the photos section of the solder side of the board with the switch in place.

I wrote up the project for my website at:
http://members.cox.net/caveradioat/

de KE7HR Paul

524. PA instability

Yahoo group: mmr40owngrp
Date: 2008-05-04 16:31:24 UTC
From: hinojones
Topic: 524 Message: 524

Hi,

I'm a newcomer to the group but I have had a search through past messages and haven't spotted an answer that has helped me sort this out yet - apologies if I missed one.

I have recently built one of these kits and most things are working great but I seem to be hitting one last (I hope...) hurdle while trying to get the transmitter PA set up.

I have my kit wired up to a good stiff power supply and through a Dan Tayloe indicator/bridge to one of 2 different aerials. One aerial is a loft mounted dipole, the other
is a mag loop next to the shack. One thing to mention about the bridge is that is presents a 50 ohm resistive load to the rig when switched into the circuit so that you can tune up without upsetting the PA transistors.

I tuned up the output transformers to a nice peak, adjusted the PA bias until the keyed but unmodulated current drain increased by 10-20ma, wound up the sidetone level (V4) and checked the output signal on my 'scope.

When transmitting into a resistive load (either dummy load or aerial via the bridge) I get a
beautiful 'scope trace with a nice near-sinusoidal envelope crossing sharply at 0V. Depending on where I am tuned in the band, I also get output power close to that specified.

But as soon as I transmit into an aerial with the bridge switched out I get some nasty noise
smothering the output signal. It sometimes occurs just over a small portion of the waveform, and other times it covers a greater fraction. The amplitude is larger than that of
the desired output signal.

If I wind back the PA bias the noise goes away, but the wanted signal amplitude also drops and the 0V crossover point gets stretched along the time axis as the output device is conducting for less and less of the cycle.

I have tried this with various settings of the tone pot, V4, and with different ways of attaching the scope (e.g. directly clipped onto the PA output, coupling loop close to mag loop aerial etc.) but the end result is always the same: clean into a 50 ohm resistive load,
noisy into a "real life" load.

Just to add: I unplugged the speaker and freq. counter, replaced the mic with a 3.5mm plug wired to permanently key the TX and used short, twisted power leads to keep the risk of interference as low as possible but it seems more a consequence of what is coming back down the aerial feeder.

I will be very grateful on any hints that people might have or suggestions for things to try.

Regards,
Brian Jones, G1ZEZ

525. Re: PA instability

Yahoo group: mmr40owngrp
Date: 2008-05-10 18:13:51 UTC
From: hinojones
Topic: 524 Message: 525

I seem to have sorted this out now:

A lot of it stemmed from a stupid mistake on my part in that I am used to aligning SSB TXs with a two tone generator and so when using the MMR-40 in-built sidetone generator I tuned the BFO on autopilot and tried to get a sharp 0V crossover rather than the continuous carrier that I should have been trying to get.

After correcting that I worked through the rest of the TX alignment procedure and the output was much cleaner. I still had to wind back the PA bias just a notch to prevent noisy oscillation when transmitting into a non-matched load but things all seem to be clean and well behaved now.

This also cleared up one other small niggle I had: the alignment notes say to increase V4 until the output power stops increasing. This now happens whereas before it continued increasing right up until the end of the variable resistor track.

Tuning up at mid band gives me about 8W PEP, dropping slowly over the top half of the band, dropping faster over the bottom half until it peters out just above 7MHz.

Hope to see you on the air soon.

Brian, G1ZEZ

526. L1 Coil form Length

Yahoo group: mmr40owngrp
Date: 2008-05-31 03:49:02 UTC
From: ken_pendarvis
Topic: 526 Message: 526

Hello All:
Just started my MMR40. In the instructions it says that one set of holes for the wires is closer to the edge of the coil than the the other set, and that this "closer to the end" set of holes is to be positioned towards the 3rd nut from the front of the board. On my coil form the two sets of wire holes are each equidistant from each end. Does this matter? If so, how shall I proceed?
Also I am having some trouble getting the nuts soldered to the PC board. Yes, I realize that this is probably a heat issue. I did clean the nuts by polishing them with a cloth wheel on a Dremel tool , then washing them off with Acetone. For soldering I am using a Weller WTCPT station with an 800 degree tip. Solder is 62/36/2 (%2 Silver solder) which is all I had on hand and what I typically use on PC boards anyway.
Any suggestions are appreciated. Thanks in advance.
73, Ken 5R8GQ/AD6KA

527. Re: L1 Coil form Length

Yahoo group: mmr40owngrp
Date: 2008-05-31 22:09:18 UTC
From: wa5pse
Topic: 526 Message: 527

Hi Ken,

Good luck on building your MMR40...

My build went well and the rig worked nicely on first power up.

I did have an interesting time getting my VFO coil put together, but,
I think i(as I often do with these things)) made it more difficult
than it really should have been..

Anyway to answer your first question, which end you orient to the
front won't make any difference.

Question 2, Sounds like you did a much better job of prepping than
you may really nreed...
However,

You may indeed not be getting enough heat, the temp of your iron is
not so important as the power that it delivers...

In other words, you may have an 800 Deg iron, but that tells you how
hot the iron CAN GET!
If you have too much conductor pulling the heat away, say for a 25
watt iron, then you may never achieve 800 deg to solder with.

I'd say you probably need at least a 40 watt iron for the task of
soldering those nuts in..

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "ken_pendarvis"
<ken_pendarvis@...> wrote:
>
> Hello All:
> Just started my MMR40. In the instructions it says that one set of
> holes for the wires is closer to the edge of the coil than the the
> other set, and that this "closer to the end" set of holes is to be
> positioned towards the 3rd nut from the front of the board. On my
coil
> form the two sets of wire holes are each equidistant from each end.
> Does this matter? If so, how shall I proceed?
> Also I am having some trouble getting the nuts soldered to the PC
board.
> Yes, I realize that this is probably a heat issue. I did clean the
nuts
> by polishing them with a cloth wheel on a Dremel tool , then
washing

> them off with Acetone. For soldering I am using a Weller WTCPT
station
> with an 800 degree tip. Solder is 62/36/2 (%2 Silver solder) which
is
> all I had on hand and what I typically use on PC boards anyway.
> Any suggestions are appreciated. Thanks in advance.
> 73, Ken 5R8GQ/AD6KA
>

528. Re: L1 Coil form Length

Yahoo group: mmr40owngrp
Date: 2008-06-01 03:18:51 UTC
From: ken_pendarvis
Topic: 526 Message: 528

>SNIP<
Hi Mike:

Thanks for the reply and the good advice.
Good going on getting your MMR40 to
work on first power up. Always love
those "Smoke Tests", hihi.

Well, the Weller WTCPT is advertised
as a 60 watt "station". What that
translates to as far as watts of heat
when metal meets metal I don't know.
There are three series tips available
for it, 600, 700, and 800 degrees.

I did some more work and finally
got the nuts to stay on pretty well but then
they got out of alignment because I neglected to put
the reinforcing "hold down" wires back on when
I was messing with it. DUMB! DUMB! DUMB!
The holes for those wires were filled with solder
and I was out of solder wick, I was impatient,
I should have waited. I now have the wick
to clear the holes (I took the coil off)
and am going to start over from the beginning
with a 3/16" wide spade type 800 degree tip. The first
one I tried was a pointed tip. I used that wide
tip to solder down the 2SC2879's on my K2/100
Amp Upgrade and it worked fabulously.

I think I will like the MMR40, I just think that the PTO
with the brass screw is sort of a goofy design.
I have built a lot of QRP kits and have not seen
that method of tuning before.
Yes, I know they had cost limitations because
of the Homebrew Challenge. Too bad they couldn't
of used an outboard Polyvaricon like the BITX20A,
but that would require major design changes.
(Yes, I realize that the coil/screw is an inductor
and the Polyvaricon is a capacitor).

By the time I had screwed up the tuning screw,
I still wanted to do SOME work on it, so I soldered
in the resistors for all three quardrants except the one with the
screw, leaving lots of room to play around and
get it right. Maybe instead of buffing those

nuts I should have lightly sanded them with
some fine emory paper. That often makes slick surfaces
easier to solder.

Anyway, thanks again for the advice.
I am glad that the coil orientation shouldn't
make a difference. I am otherwise happy with the
way that the coil turned out, with the turns all nice
and snug and even. No, I didn't even try to count the
turns at this point. My vision is not that acute,
and I will cross that bridge when I come to it.
TNX AGN ES 73, Ken 5R8GQ/AD6KA
>

529. New To The Group

Yahoo group: mmr40owngrp
Date: 2008-06-01 18:48:50 UTC
From: James R. Elledge
Topic: 529 Message: 529

Hi All

I purchased the MMR from Doug at the last OZARKCON QRP Convention. My board is assembled (except for final) The RX is very good (sensitivy excellent) but I could use more audio output (I am sure it is as designed). Sounds good through the computer sound cards line in (plenty of audio). I did not like the slide switch for the audio filter, replaced with a toggle. I will have to reverse the narrow/wide on the panel template. My PTO is flakey, to much "play" side to side and up/down. Thinking on adding another larger in dia nylon spacer to the front (flattened on board side for just the right fit) of the PTO assembly. Just ordered some sub-mini DPDT switches, like the mod moving the range selectot to the front panel. I have an AGC board that appeared in the handbook and W1FB's QRP notebook. I will try it and add this audio derived AGC/S-meter after everything else is working properly.

73 for now

Jim - KB2XJ

531. Re: New To The Group

Yahoo group: mmr40owngrp
Date: 2008-06-01 19:17:15 UTC
From: m0xdx
Topic: 529 Message: 531

Hi Jim,
To increase the audio output, solder a 47uF capacitor across pins 1 to 8 of the LM386.
I use my MMR-40 outside a lot when I operate portable from the beach,and the audio is now loud enough to hear easily with this mod.
You may also like to see my AVC mod on the "files" section of the user group site.It's really simple, but it works well!
Good luck with it,
Paul M0XDX

532. Re: New To The Group

Yahoo group: mmr40owngrp
Date: 2008-06-01 20:16:51 UTC
From: James R. Elledge
Topic: 529 Message: 532

--- In mmr40owngrp@yahoogroups.com, "m0xdx" <Pdumpleton@...> wrote:
>
>
>
>
> Hi Jim,
> To increase the audio output, solder a 47uF capacitor across pins 1 to
> 8 of the LM386.
> I use my MMR-40 outside a lot when I operate portable from the
> beach,and the audio is now loud enough to hear easily with this mod.
> You may also like to see my AVC mod on the "files" section of the user
> group site.It's really simple, but it works well!
> Good luck with it,
> Paul M0XDX
>
Hi Paul

I have been reading a lot of the previous msg's and did see both of your mods, I will definately add the cap and look at the "AGC" mod as well. Need to see if I have a small meter to add for audio derived S-meter and RF power. If all goes well I have Steve's digital dial assembled to add as well.

Thanks Paul 73
Jim

533. need help for seting fcc1/fcc2 on MMR40

Yahoo group: mmr40owngrp
Date: 2008-06-09 20:47:35 UTC
From: f5lct
Topic: 533 Message: 533

Bonjour ,
I have made the fcc2/fcc1 from norcall , so i think is the lo-z i
have to connect to the "LO" pad on mmr40 , and i have to set the dds
rx and tx output so witch value i have to put ???
if some can tel me witch parameter if have puting on the fcc2/fcc1
that's was nice to have my dds working like the photo of ki4qcs

regards

Hubert

534. Re: need help for seting fcc1/fcc2 on MMR40

Yahoo group: mmr40owngrp
Date: 2008-06-14 15:58:25 UTC
From: f5lct
Topic: 533 Message: 534

--- In mmr40owngrp@yahoogroups.com, "f5lct" <f5lct@...> wrote:
>
> Bonjour ,
> I have made the fcc2/fcc1 from norcall , so i think is the lo-z i
> have to connect to the "LO" pad on mmr40 , and i have to set the dds
> rx and tx output so witch value i have to put ???
> if some can tel me witch parameter if have puting on the fcc2/fcc1
> that's was nice to have my dds working like the photo of ki4qcs
>
> regards
>
> Hubert
>
so i have puting it on the lo-z , for the if i have puting 10000,0 khz
and using if - vfo mode (10000-7000=3000) 3000 is wat i puting in the
lo-z point on the mmr40 , it work's so good
nice job with it
regards
HUbert
F5LCT

535. (no subject)

Yahoo group: mmr40owngrp
Date: 2008-06-17 08:46:50 UTC
From: Marco Kava
Topic: 535 Message: 535

hi all!!
i'm marco from italy,
i have just finished my own mm40, but i have some problems during the testing that i can't resolve.
1
when i have turned on the rig for the first time, i have heard a fixed sidetone sound from the speaker...so i have immediately turned off...
then, a have turned on the rig again, instead of side tone sound i heard "hiss" sound (like manual says)
but the received signals are very very low, if i touch with the antenna to the pin1 of U6, or a pin (near c18 pads) of T1 i have loud and clear sgnals.....
2
when i key down the receiver section go off, but i dont hear any side tone.....if i touch with a little jumper the pin 7 and 8 of U4, i hear i side tone....

at the moment i haven't solder the q10 power mosfet yet, because i can't continue the test...

bye bye

536. mmr40 low reception and no side tone

Yahoo group: mmr40owngrp
Date: 2008-06-17 18:02:29 UTC
From: iz2ldm
Topic: 535 Message: 536

--- In mmr40owngrp@yahoogroups.com, Marco Kava <iz2ldm@...> wrote:
>
> hi all!!
> i'm marco from italy,
> i have just finished my own mm40, but i have some problems during the
> testing that i can't resolve.
> 1
> when i have turned on the rig for the first time, i have heard a fixed
> sidetone sound from the speaker...so i have immediately turned off...
> then, a have turned on the rig again, instead of side tone sound i
> heard "hiss" sound (like manual says)
> but the received signals are very very low, if i touch with the
> antenna to the pin1 of U6, or a pin (near c18 pads) of T1 i have
loud and clear
> sgnals.....
> 2
> when i key down the receiver section go off, but i dont hear any side
> tone.....if i touch with a little jumper the pin 7 and 8 of U4, i hear
> i side tone....
>
> at the moment i haven't solder the q10 power mosfet yet, because i
> can't continue the test...
>
>
> bye bye
>

here all transistors/fets/ics volt measurement
with 13,25 V stabillized supply

u3
1 1,39
2 0
3 0
4 0
5 6,36
6 12,97
7 6,52
8 1,39

u4
rx (tx)
1 0,01 (11,73)
2 4,89 (0)
3 0,23 (0,23)
4 0 (0)

5 0 (0)
6 0,23 (0,22)
7 0,76 (0,76)
8 12,98 (12,98)

u5/6
1 1,37 / 1,37
2 1,37 / 1,37
3 0 / 0
4 3,88 / 3,87
5 3,82 / 3,84
6 4,88 / 4,88
7 4,58 / 4,34
8 5 / 5

u7
rx (tx)
1 1,37 (1,37)
2 3,88 (3,85)
3 1,37 (1,37)
4 1,37 (1,37)
5 1,37 (1,37)
6 0 (0)
7 0 (0)
8 0 (0)
9 2,51 (0,35)
10 2,51 (0,35)
11 2,51 (0,35)
12 1,37 (1,37)
13 3,87 (3,88)
14 3,87 (1,87)
15 1,38 (3,85)
16 5 (5)

q1 rx / tx

d 0 0
g 12,79 0
s 0 0

q2

d 0 0
g 0 0
s 0 0

q3

d 0 0
g 12,80 12,78
s 0 0

```
q4

d 0 0
g 0 11,31
s 0 0

q5

d 0 0
g 12,81 12,77
s 0 0

q12

d 12,78 0
g 0 11,74
s 0 0

q14

d 5 5
g 1,6 1,6
s 0,46 0,46

q6

c 5 5
b 3,84 3,84
e 3,17 3,17

q7

c 4,69 4,68
b 1,29 1,29
e 0,63 0,63

q8

c 12,81 12,77
b 12,84 12,54
e 12.99 12,99

q9

c 12,99 12,99
b 2,72 2,71
e 2,10 2,09
```

537. mmr40 low reception and no side tone

Yahoo group: mmr40owngrp
Date: 2008-06-17 18:25:25 UTC
From: iz2ldm
Topic: 535 Message: 537

--- In mmr40owngrp@yahoogroups.com, Marco Kava <iz2ldm@...> wrote:
>
> hi all!!
> i'm marco from italy,
> i have just finished my own mm40, but i have some problems during the
> testing that i can't resolve.
> 1
> when i have turned on the rig for the first time, i have heard a fixed
> sidetone sound from the speaker...so i have immediately turned off...
> then, a have turned on the rig again, instead of side tone sound i
> heard "hiss" sound (like manual says)
> but the received signals are very very low, if i touch with the
> antenna to the pin1 of U6, or a pin (near c18 pads) of T1 i have loud
and clear
> sgnals.....
> 2
> when i key down the receiver section go off, but i dont hear any side
> tone.....if i touch with a little jumper the pin 7 and 8 of U4, i hear
> i side tone....
>
> at the moment i haven't solder the q10 power mosfet yet, because i
> can't continue the test...
>
>
> bye bye
>

hi all,
here all transistors/fets/ics volt measurement.

@ 13,25 Vcc

u3
1 1,39
2 0
3 0
4 0
5 6,36
6 12,97
7 6,52
8 1,39

u4
rx (tx)
1 0,01 (11,73)
2 4,89 (0)

3 0,23 (0,23)
4 0 (0)
5 4,89 (4,89)
6 0,23 (0,22)
7 0,76 (0,76)
8 12,98 (12,98)

u5/6
1 1,37 / 1,37
2 1,37 / 1,37
3 0 / 0
4 3,88 / 3,87
5 3,82 / 3,84
6 4,88 / 4,88
7 4,58 / 4,34
8 5 / 5

u7
rx (tx)
1 1,37 (1,37)
2 3,88 (3,85)
3 1,37 (1,37)
4 1,37 (1,37)
5 1,37 (1,37)
6 0 (0)
7 0 (0)
8 0 (0)
9 2,51 (0,35)
10 2,51 (0,35)
11 2,51 (0,35)
12 1,37 (1,37)
13 3,87 (3,88)
14 3,87 (1,87)
15 1,38 (3,85)
16 5 (5)

u8

1 5
2 5
3 5
4 0
5 5
6 5
7 5
8 12,98
q1 rx / tx

d 0 0
g 12,79 0
s 0 0

q2

d 0 0
g 0 0
s 0 0

q3

d 0 0
g 12,80 12,78
s 0 0

q4

d 0 0
g 0 11,31
s 0 0

q5

d 0 0
g 12,81 12,77
s 0 0

q12

d 12,78 0
g 0 11,74
s 0 0

q14

d 5 5
g 1,6 1,6
s 0,46 0,46

q6

c 5 5
b 3,84 3,84
e 3,17 3,17

q7

c 4,69 4,68
b 1,29 1,29
e 0,63 0,63

q8

c 12,81 12,77
b 12,84 12,54
e 12.99 12,99

q9

c 12,99 12,99
b 2,72 2,71
e 2,10 2,09

538. Re: [mmr40owngrp] mmr40 low reception and no side tone

Yahoo group: mmr40owngrp
Date: 2008-06-17 20:50:16 UTC
From: David Wendt
Topic: 535 Message: 538

I have not looked at the voltages you have there and someone may see a significant clue there.
I would take a look at what is associated with the T/R and CW/SSB switching. It is a bit tricky how it was done. The stereo jack for the key/mic is connected to all of this. A mono plug into the strereo jack sets it into the CW mode with the side tone on transmit. The side tone is not only your indication of the keying, but is also what is generating the CW signal. Send a single tone through a SSB transmitter and it is a CW signal that comes out. The closing of the tip connection is of course the key, but this is also the T/R line.

Dave, N9GQ

iz2ldm <iz2ldm@...> wrote:

--- In mmr40owngrp@yahoogroups.com, Marco Kava <iz2ldm@...> wrote:
>
> hi all!!
> i'm marco from italy,
> i have just finished my own mm40, but i have some problems during the
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> heard "hiss" sound (like manual says)
> but the received signals are very very low, if i touch with the
> antenna to the pin1 of U6, or a pin (near c18 pads) of T1 i have loud and clear
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u4
rx (tx)
1 0,01 (11,73)
2 4,89 (0)
3 0,23 (0,23)
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6 0,23 (0,22)
7 0,76 (0,76)
8 12,98 (12,98)

u5/6
1 1,37 / 1,37
2 1,37 / 1,37
3 0 / 0
4 3,88 / 3,87
5 3,82 / 3,84
6 4,88 / 4,88
7 4,58 / 4,34
8 5 / 5

u7
rx (tx)
1 1,37 (1,37)
2 3,88 (3,85)
3 1,37 (1,37)
4 1,37 (1,37)
5 1,37 (1,37)
6 0 (0)
7 0 (0)
8 0 (0)
9&n bsp; 2,51 (0,35)
10 2,51 (0,35)
11 2,51 (0,35)
12 1,37 (1,37)
13 3,87 (3,88)
14 3,87 (1,87)
15 1,38 (3,85)
16 5 (5)

u8

```
1 5
2 5
3 5
4 0
5 5
6 5
7 5
8 12,98
q1 rx / tx

d 0 0
g 12,79 0
s 0 0

q2

d 0 0
g 0 0
s 0 0

q3

d 0 0
g 12,80 12,78
s 0 0

q4

d 0 0
g 0 11,31
s 0 0

q5

d 0 0
g 12,81 12,77
s 0 0

q12

d 12,78 0
g 0 11,74
s 0 0

q14

d 5 5
g 1,6 1,6
s 0,46 0,46

q6

c 5 5
b 3,84 3,84
e 3,17 3,17
```

q7

c 4,69 4,68
b 1,29 1,29
e 0,63 0,63

q8
< br>c 12,81 12,77
b 12,84 12,54
e 12.99 12,99

q9

c 12,99 12,99
b 2,72 2,71
e 2,10 2,09

539. Re: Photo of MMR-40 with frequency counter fitted

Yahoo group: mmr40owngrp
Date: 2008-06-18 13:37:14 UTC
From: john_tartar
Topic: 451 Message: 539

Has anyone tried the $10 N3ZI Digital Dial for this.
http://www.pongrance.com/

--- In mmr40owngrp@yahoogroups.com, "m0xdx" <Pdumpleton@...> wrote:
>
> Hi,
> I have posted a photo of my finished MMR-40 with the "FVMaster
Frecon"
> frequency counter fitted.
> This counter fits nicely in the top cover of the supplied case as
you
> can see.
> I've worked quite a few stions on ssb,and I get very good audio
reports.
> I've increased the received audio dramatically and made a basic
audio
> agc circuit so strong signals don't deafen me!
> I'll post details of these mods later.
>
> 73's Paul M0XDX
>

540. Re: mmr40 low reception and no side tone

Yahoo group: mmr40owngrp
Date: 2008-06-18 18:16:47 UTC
From: Bill Noyce
Topic: 535 Message: 540

```
> q12
>
> d 12,78 0
> g 0 11,74
> s 0 0

Q12 looks good -- it's pulling its drain to ground when the comparator
sees the key down.

> q8
>
> c 12,81 12,77
> b 12,84 12,54
> e 12.99 12,99

Q8 doesn't look right. I think it should be turned on (about +12 on
the collector) only during key-down. It then controls Q2, Q3, and Q%
in the T/R switch, and Q7 and Q9 in the transmit driver.

Check that Q8 is a PNP 2N4403, and that R13 (22k) and R26 (4.7k) have
the proper values...
-- Bill, AB1AV
```

541. Re: mmr40 low reception and no side tone

Yahoo group: mmr40owngrp
Date: 2008-06-19 17:23:23 UTC
From: iz2ldm
Topic: 535 Message: 541

ok ok, tnx to all
i have just resolve the failure of my mmr40.
1. non side tone- i have inverted 2n4403 -> 2n4401 (stupid!! was written)
2. i have changed t1 with another (if 10.7 123),probaly i have damage
it on first check up....(more stupid!!!!)
any way,
all seems ok, i have made my first qso with netherlands OM (at the
moment in france) give to me 559 559...
but i have another question:
when i make the TX test, i have measured the voltage on pad of diode
rf detector and a have bring it about a 23-25V (means 5-6watts - i
don't have a hf wattmeter) but the TX current is 350mA. is possible?
the manual says 900mA
73 marco iz2ldm.

--- In mmr40owngrp@...m, "Bill Noyce" <WBNoyce@...> wrote:
>
> > q12
> >
> > d 12,78 0
> > g 0 11,74
> > s 0 0
>
> Q12 looks good -- it's pulling its drain to ground when the comparator
> sees the key down.
>
> > q8
> >
> > c 12,81 12,77
> > b 12,84 12,54
> > e 12.99 12,99
>
> Q8 doesn't look right. I think it should be turned on (about +12 on
> the collector) only during key-down. It then controls Q2, Q3, and Q%
> in the T/R switch, and Q7 and Q9 in the transmit driver.
>
> Check that Q8 is a PNP 2N4403, and that R13 (22k) and R26 (4.7k) have
> the proper values...
> -- Bill, AB1AV
>

542. Re: mmr40 low reception and no side tone

Yahoo group: mmr40owngrp
Date: 2008-06-21 12:10:59 UTC
From: wa5pse
Topic: 535 Message: 542

Hello Marco,

350ma sounds about right to me...

Do the math...IxIxZ...900ma would yield about 40 watts out...
350 ma, off top of my head would give in neighbor hood of 4 to 5
watts.

Now, if you're talking power supply current that's totally different
thing.

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "iz2ldm" <iz2ldm@...> wrote:
>
> ok ok, tnx to all
> i have just resolve the failure of my mmr40.
> 1. non side tone- i have inverted 2n4403 -> 2n4401 (stupid!! was
written)
> 2. i have changed t1 with another (if 10.7 123),probaly i have
damage
> it on first check up....(more stupid!!!!)
> any way,
> all seems ok, i have made my first qso with netherlands OM (at the
> moment in france) give to me 559 559...
> but i have another question:
> when i make the TX test, i have measured the voltage on pad of diode
> rf detector and a have bring it about a 23-25V (means 5-6watts - i
> don't have a hf wattmeter) but the TX current is 350mA. is possible?
> the manual says 900mA
> 73 marco iz2ldm.
>
> --- In mmr40owngrp@yahoogroups.com, "Bill Noyce" <WBNoyce@> wrote:
> >
> > > q12
> > >
> > > d 12,78 0
> > > g 0 11,74
> > > s 0 0
> >
> > Q12 looks good -- it's pulling its drain to ground when the
comparator
> > sees the key down.
> >
> > > q8
> > >

> > > c 12,81 12,77
> > > b 12,84 12,54
> > > e 12.99 12,99
> >
> > Q8 doesn't look right. I think it should be turned on (about +12
on
> > the collector) only during key-down. It then controls Q2, Q3,
and Q%
> > in the T/R switch, and Q7 and Q9 in the transmit driver.
> >
> > Check that Q8 is a PNP 2N4403, and that R13 (22k) and R26 (4.7k)
have
> > the proper values...
> > -- Bill, AB1AV
> >
>

543. Re: mmr40 low reception and no side tone

Yahoo group: mmr40owngrp
Date: 2008-06-21 12:38:06 UTC
From: wa5pse
Topic: 535 Message: 543

Marco,

I made my previous reply thinking your "TX current" was rf current...
In fact, you should see about 900 ma at the supply during xmt...that
is due to the requirements of the various circuits in the rig and the
efficiency of the final amp stage.

RF antenna current would be an ac current, of course, and, power
supply current would be dc...

So the question should be, where are you measuring the 350ma and how?

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "iz2ldm" <iz2ldm@...> wrote:
>
> ok ok, tnx to all
> i have just resolve the failure of my mmr40.
> 1. non side tone- i have inverted 2n4403 -> 2n4401 (stupid!! was
written)
> 2. i have changed t1 with another (if 10.7 123),probaly i have
damage
> it on first check up....(more stupid!!!!)
> any way,
> all seems ok, i have made my first qso with netherlands OM (at the
> moment in france) give to me 559 559...
> but i have another question:
> when i make the TX test, i have measured the voltage on pad of diode
> rf detector and a have bring it about a 23-25V (means 5-6watts - i
> don't have a hf wattmeter) but the TX current is 350mA. is possible?
> the manual says 900mA
> 73 marco iz2ldm.
>
> --- In mmr40owngrp@yahoogroups.com, "Bill Noyce" <WBNoyce@> wrote:
> >
> > > q12
> > >
> > > d 12,78 0
> > > g 0 11,74
> > > s 0 0
> >
> > Q12 looks good -- it's pulling its drain to ground when the
comparator
> > sees the key down.
> >
> > > q8

> > >
> > > c 12,81 12,77
> > > b 12,84 12,54
> > > e 12.99 12,99
> >
> > Q8 doesn't look right. I think it should be turned on (about +12
on
> > the collector) only during key-down. It then controls Q2, Q3,
and Q%
> > in the T/R switch, and Q7 and Q9 in the transmit driver.
> >
> > Check that Q8 is a PNP 2N4403, and that R13 (22k) and R26 (4.7k)
have
> > the proper values...
> > -- Bill, AB1AV
> >
>

544. NC40A + Hendricks digi frequency counter - HELP Please

Yahoo group: mmr40owngrp
Date: 2008-06-23 00:55:06 UTC
From: n8ewy
Topic: 544 Message: 544

I'm wondering if anyone has a suggestion as to where I connect the pads labeled "sig in" on my Hendricks digital frequency counter? I am connecting to my NorCal 40A. I'm not clear where to connect the two leads between the two units. I've looked closely at both manuals.

As far as that goes, I'm going to build and connect a Hendricks digital dial frequency counter to my SW40+ as well. I'll be looking for the same connection point. So anyone that might know where to hook either of the units that could help me, I would appreciate it immensely.

Any HELP?
Thanks
Dohn
N8EWY

545. Re: [mmr40owngrp] NC40A + Hendricks digi frequency counter - HELP Please

Yahoo group: mmr40owngrp
Date: 2008-06-23 01:07:53 UTC
From: bob bailey
Topic: 544 Message: 545

I believe it would be at the top of R29 with a .1cap in series of the counters cable.

bob
WB7DMX

From: n8ewy
Sent: Sunday, June 22, 2008 8:55 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] NC40A + Hendricks digi frequency counter - HELP Please

I'm wondering if anyone has a suggestion as to where I connect the pads labeled "sig in" on my Hendricks digital frequency counter? I am connecting to my NorCal 40A. I'm not clear where to connect the two leads between the two units. I've looked closely at both manuals.

As far as that goes, I'm going to build and connect a Hendricks digital dial frequency counter to my SW40+ as well. I'll be looking for the same connection point. So anyone that might know where to hook either of the units that could help me, I would appreciate it immensely.

Any HELP?
Thanks
Dohn
N8EWY

546. Re: [mmr40owngrp] NC40A + Hendricks digi frequency counter - HELP Please

Yahoo group: mmr40owngrp
Date: 2008-06-23 01:10:14 UTC
From: bob bailey
Topic: 544 Message: 546

sorry, that would be for the sw40+ kit.
never built the one from nor-cal so I cant answer for that one.
bob

From: bob bailey
Sent: Sunday, June 22, 2008 9:07 PM
To: mmr40owngrp@yahoogroups.com
Subject: Re: [mmr40owngrp] NC40A + Hendricks digi frequency counter - HELP Please

I believe it would be at the top of R29 with a .1cap in series of the counters cable.

bob
WB7DMX

From: n8ewy
Sent: Sunday, June 22, 2008 8:55 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] NC40A + Hendricks digi frequency counter - HELP Please

I'm wondering if anyone has a suggestion as to where I connect the pads
labeled "sig in" on my Hendricks digital frequency counter? I am
connecting to my NorCal 40A. I'm not clear where to connect the two
leads between the two units. I've looked closely at both manuals.

As far as that goes, I'm going to build and connect a Hendricks digital
dial frequency counter to my SW40+ as well. I'll be looking for the
same connection point. So anyone that might know where to hook either
of the units that could help me, I would appreciate it immensely.

Any HELP?
Thanks
Dohn
N8EWY

547. PTO Oscillator Frequency Question

Yahoo group: mmr40owngrp
Date: 2008-06-25 23:42:17 UTC
From: ken_pendarvis
Topic: 547 Message: 547

I am starting to test my MMR-40. FB on 5 vdc out of U1 and U2.
The lowest I can get the PTO frequency by moving
coils togther on L2 is 3.160 MHz. Is this the
"much higher" as stated in the manual that I would
have the feedback winding and regular windings reversed?
I do not think so because of careful visual inspection.
To RAISE the PTO freq the manual suggests removing
a turn of wire one at a time. Does this
mean I have to ADD turns to the PTO coil?

Could I pad the circuit with a small cap somewhere?
I have a 22pf disc cap left over from the build
and amwondering what it is for.

Thaks in advance for advice from the experts and
those who have gone before me. I am sure that this subject
has been posted before. I tried searching
the archives but there are just so many messages
under the subject of "PTO Frequency", etc.

TNX AGN ES 73, Ken AD6KA/5R8GQ

548. Re: PTO Oscillator Frequency Question: FIXED!!!

Yahoo group: mmr40owngrp
Date: 2008-06-26 02:29:04 UTC
From: ken_pendarvis
Topic: 547 Message: 548

I am right on 3.0 MHz now.
I soldered in parallel with C8 first
a 22pf cap, (Got a lot closer) and then
an 18 pf cap. Jeeze, I am right on the money.
Good thing I have big junk box!
73, Ken AD6KA/5R8GQ

--- In mmr40owngrp@yahoogroups.com, "ken_pendarvis"
<ken_pendarvis@...> wrote:
>
> I am starting to test my MMR-40. FB on 5 vdc out of U1 and U2.
> The lowest I can get the PTO frequency by moving
> coils togther on L2 is 3.160 MHz. Is this the
> "much higher" as stated in the manual that I would
> have the feedback winding and regular windings reversed?
> I do not think so because of careful visual inspection.
> To RAISE the PTO freq the manual suggests removing
> a turn of wire one at a time. Does this
> mean I have to ADD turns to the PTO coil?
>
> Could I pad the circuit with a small cap somewhere?
> I have a 22pf disc cap left over from the build
> and amwondering what it is for.
>
> Thaks in advance for advice from the experts and
> those who have gone before me. I am sure that this subject
> has been posted before. I tried searching
> the archives but there are just so many messages
> under the subject of "PTO Frequency", etc.
>
> TNX AGN ES 73, Ken AD6KA/5R8GQ
>

549. Xmit Voltage Adjustment Problem..Need Help Please!

Yahoo group: mmr40owngrp
Date: 2008-06-26 20:17:06 UTC
From: ken_pendarvis
Topic: 549 Message: 549

Per the instructions on Page 13, I have been able to adjust
T2 and T8 for a reading of 8.0 volts with V4 set to midrange as
indicated. When I turn V4 to complete counter clockwise I do not
get zero volts. I have adjusted C21 so the voltage
will lower, the lowest I can get the V4 at minimum is.4 volts.

The manual says that "this indicates that the BFO isn't set quite right
and there is carrier leaking through the crystal filter".

It does not offer a solution.

The receiver works FB, like gangbusters.

Any suggestions would be greatly welcomed!!!

TNX ES 73, Ken AD6KA

550. xmit voltage problem, SECOND REQUEST for help.

Yahoo group: mmr40owngrp
Date: 2008-07-03 01:00:18 UTC
From: ken_pendarvis
Topic: 550 Message: 550

Per the instructions on Page 13, I have been able to adjust
T2 and T3 for a reading of 8.0 volts with V4 set to midrange as
indicated. When I turn V4 to complete counter clockwise I do not
get zero volts as per the manual. I have adjusted C21 so the voltage
will lower, the lowest I can get the V4 at minimum is.4 volts.

The manual says that "this indicates that the BFO isn't set quite right
and there is carrier leaking through the crystal filter".

It does not offer a solution.
Again, the manual does NOT offer a solution when this happens.

Any suggestions would be GREAT welcomed!!!

TNX ES 73, Ken AD6KA
kenp@...

551. Re: [mmr40owngrp] xmit voltage problem, SECOND REQUEST for help.

Yahoo group: mmr40owngrp
Date: 2008-07-03 04:27:49 UTC
From: Bill Linn
Topic: 550 Message: 551

Hi Ken, I built the MMR40 too and had to fiddle with the tune up quite a bit before getting it to operate correctly.
However, the manual does say that when the voltage doesn't zero, due to the carrier leaking through the filter, that you should slightly re-adjust the BFO trimmer to attain zero. *So, the manual does suggest a solution.* If memory serves me, I believe I had to do a bit of balancing between T2 and T3 and the BFO trimmer to get it to zero out.
Are you using the built in RF voltage Probe?

By the way, I made several FD contacts using the MMR40. Hope you get yours completed soon, I'm sure you'll have a good time with it. I've built several of Steve's designs, including the ATS3, and am convinced they are top-notch for the money!

Bill - W7WEL

ken_pendarvis wrote:
> Per the instructions on Page 13, I have been able to adjust
> T2 and T3 for a reading of 8.0 volts with V4 set to midrange as
> indicated. When I turn V4 to complete counter clockwise I do not
> get zero volts as per the manual. I have adjusted C21 so the voltage
> will lower, the lowest I can get the V4 at minimum is.4 volts.
>
> The manual says that "this indicates that the BFO isn't set quite right
> and there is carrier leaking through the crystal filter".
>
> It does not offer a solution.
> Again, the manual does NOT offer a solution when this happens.
>
> Any suggestions would be GREAT welcomed!!!
>
> TNX ES 73, Ken AD6KA
> kenp@...
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
> --
>
>
> No virus found in this incoming message.
> Checked by AVG.

> Version: 8.0.134 / Virus Database: 270.4.3/1526 - Release Date: 6/30/2008 8:43 AM
>

552. High SWR but not because of antenna

Yahoo group: mmr40owngrp
Date: 2008-07-03 13:56:59 UTC
From: Don Hatlestad
Topic: 552 Message: 552

I never had a QRP SWR meter before now and I found that the SWR to my known-to-be-resonant antenna is really high with my MMR-40 but fine with my IC 718 at 5W. How do I diagnose this? I'm running through the tune-up procedure again. But should I look at something else?

Don, AC7FA
http://ac7fa.net

553. Re: xmit voltage problem, SECOND REQUEST for help.

Yahoo group: mmr40owngrp
Date: 2008-07-03 21:10:33 UTC
From: ken_pendarvis
Topic: 550 Message: 553

Hi Bill:
Thanks for the reply and the advice.
I am using the built in RF voltage Probe.
But if I tweak T2 & T3 to get that voltage
down to zero, when I bring V4 back up to Midrange, I only
have a voltage of about 5 volts.

The receiver works FB,no problems or
complaints there.

I made a homebrew mic with an electret element
from All Electronics, a very small plastic
enclosure, and a momentary switch.
Without installing the IRF510 final I tried
speaking into the mic and listening for a signal
on my big rig. I heard it but it was distorted
and with a carrier in the middle of the signal.
Adjusting C21 lowers the carrier but still lowers
the RF Voltage.

I am stuck here.
73, Ken

--- In mmr40owngrp@yahoogroups.com, Bill Linn <wlinn@...> wrote:
>
> Hi Ken, I built the MMR40 too and had to fiddle with the tune up
quite a
> bit before getting it to operate correctly.
> However, the manual does say that when the voltage doesn't zero,
due to
> the carrier leaking through the filter, that you should slightly
> re-adjust the BFO trimmer to attain zero. *So, the manual does
suggest
> a solution.* If memory serves me, I believe I had to do a bit of
> balancing between T2 and T3 and the BFO trimmer to get it to zero
out.
> Are you using the built in RF voltage Probe?
>
> By the way, I made several FD contacts using the MMR40. Hope you
get
> yours completed soon, I'm sure you'll have a good time with it.
I've
> built several of Steve's designs, including the ATS3, and am
convinced
> they are top-notch for the money!
>

> Bill - W7WEL
>
> ken_pendarvis wrote:
> > Per the instructions on Page 13, I have been able to adjust
> > T2 and T3 for a reading of 8.0 volts with V4 set to midrange as
> > indicated. When I turn V4 to complete counter clockwise I do not
> > get zero volts as per the manual. I have adjusted C21 so the
voltage
> > will lower, the lowest I can get the V4 at minimum is.4 volts.
> >
> > The manual says that "this indicates that the BFO isn't set quite
right
> > and there is carrier leaking through the crystal filter".
> >
> > It does not offer a solution.
> > Again, the manual does NOT offer a solution when this happens.
> >
> > Any suggestions would be GREAT welcomed!!!
> >
> > TNX ES 73, Ken AD6KA
> > kenp@...
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
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> >
> > --

> >
> >
> > No virus found in this incoming message.
> > Checked by AVG.
> > Version: 8.0.134 / Virus Database: 270.4.3/1526 - Release Date:
6/30/2008 8:43 AM
> >
>

554. Re: [mmr40owngrp] xmit voltage problem, SECOND REQUEST for help.

Yahoo group: mmr40owngrp
Date: 2008-07-03 21:25:01 UTC
From: David Wendt
Topic: 550 Message: 554

Hello Ken and Bill,

I had to search around a bit, but found the suggested audio spectrum analylzer software and a simple noise generator were very helpful to get the BFO right to the sweet spot. There is an important fundamental relationship going on here, so it is important to get the low end cutoff point.

Check out the pages by N0SS (in the Elecraft kit area) for a number of excellent files about building a noise generator. www.n0ss.com or N5ESE http://www.io.com/~n5fc/noise.htm

Spectran by I2PHD is wonderful software for viewing the spectrum through the radio with the noise source. http://digilander.libero.it/i2phd/spectran.html

If you are not able to adjust on the transmit leakage level, then it gets into that careful looking for a bridge here or short there and checking the component markings one more time type of kit building effort.

I have made many SSB contacts with the MMR40. I used it on Field Day too. My most fun use was with the Contest Journal North America QSO party in February. I was able to work 18 states in about 2 hours time. All SSB with the rig and with a solar charged gell cell.

73
Dave, N9GQ

Bill Linn <wlinn@...> wrote:
Hi Ken, I built the MMR40 too and had to fiddle with the tune up quite a bit before getting it to operate correctly.
However, the manual does say that when the voltage doesn't zero, due to the carrier leaking through the filter, that you should slightly re-adjust the BFO trimmer to attain zero. *So, the manual does suggest a solution.* If memory serves me, I believe I had to do a bit of balancing between T2 and T3 and the BFO trimmer to get it to zero out.
Are you using the built in RF voltage Probe?

By the way, I made several FD contacts using the MMR40. Hope you get yours completed soon, I'm sure you'll have a good time with it. I've built several of Steve's designs, including the ATS3, and am convinced they are top-notch for the money!

Bill - W7WEL

ken_pendarvis wrote:
> Per the instructions on Page 13, I have been able to adjust
> T2 and T3 for a reading of 8.0 volts with V4 set to midrange as
> indicated. When I turn V4 to complete counter clockwise I do not
> get zero volts as per the manual. I have adjusted C21 so the voltage
> will lower, the lowest I can get the V4 at minimum is.4 volts.

>
> The manual says that "this indicates that the BFO isn't set quite right
> and there is carrier leaking through the crystal filter".
>
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>
> Any suggestions would be GREAT welcomed!!!
>
> TNX ES 73, Ken AD6KA
> kenp@...
>
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> ------------------------------------
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> Yahoo! Groups Links
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>
>
> --
>
>
> No virus found in this incoming message.
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> Version: 8.0.134 / Virus Database: 270.4.3/1526 - Release Date: 6/30/2008 8:43 AM
>

555. RE: [mmr40owngrp] High SWR but not because of antenna

Yahoo group: mmr40owngrp
Date: 2008-07-04 12:38:37 UTC
From: fhump@milwpc.com
Topic: 552 Message: 555

If you have access to a spectrum analyzer the tune up is easier. It is easy to get if I remember right around 3 mhz if you don't have the tune up right. I had the same problem also had some AM on CW when I used it. Even with advance equipment I had to play with it a while be for I got it right. For some of us the basic tune up needs a little refining. Or might be operator error in my case
73
Frank
KA9FZR

---- Original Message ----
From: don.ac7fa@...
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] High SWR but not because of antenna
Date: Thu, 03 Jul 2008 13:56:59 -0000

>I never had a QRP SWR meter before now and I found that the SWR to my
>known-to-be-resonant antenna is really high with my MMR-40 but fine
>with my IC 718 at 5W. How do I diagnose this? I'm running through the
>tune-up procedure again. But should I look at something else?
>
>Don, AC7FA
>http://ac7fa.net
>

556. Re: High SWR but not because of antenna

Yahoo group: mmr40owngrp
Date: 2008-07-04 22:03:28 UTC
From: wa5pse
Topic: 552 Message: 556

Without more information, the obvious explanation is that the
frequency of the signal being measured by your swr meter is not at
the resonant frequency of your antenna...

If you have an o-scope good for at least 10 mhz, you should be able
to view and do the math to see that you are actually delivering power
on 7 mhz.

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "Don Hatlestad" <don.ac7fa@...>
wrote:
>
> I never had a QRP SWR meter before now and I found that the SWR to
my
> known-to-be-resonant antenna is really high with my MMR-40 but fine
> with my IC 718 at 5W. How do I diagnose this? I'm running through
the
> tune-up procedure again. But should I look at something else?
>
> Don, AC7FA
> http://ac7fa.net
>

557. Re: High SWR but not because of antenna

Yahoo group: mmr40owngrp
Date: 2008-07-05 18:12:10 UTC
From: Don Hatlestad
Topic: 552 Message: 557

Thanks to those that replied. I went through the entire tune-up process again and managed to fix the problem. Tune up is quite a chore without a signal generator or a scope. The rig isn't precisely tuned but will put out 5W now and the antenna matches FB.

--- In mmr40owngrp@yahoogroups.com, "wa5pse" <k9qb@...> wrote:
>
>
> Without more information, the obvious explanation is that the
> frequency of the signal being measured by your swr meter is not at
> the resonant frequency of your antenna...
>
> If you have an o-scope good for at least 10 mhz, you should be able
> to view and do the math to see that you are actually delivering power
> on 7 mhz.
>
> Mike, WA5PSE
>

Don, AC7FA
http://ac7fa.net

558. Can't adjust for zero power with no modulation

Yahoo group: mmr40owngrp
Date: 2008-07-22 05:26:18 UTC
From: r2000spad13
Topic: 558 Message: 558

I'm having trouble with my minimum power output with no modulation on ssb.

I've gone through all the adjustments but I get a significant amount of power transmitted with no modulation from the microphone. By significant I mean 2 to 3 Watts out with no input to the microphone.

I've tweeked C21 while watching the power meter with no significant change.

Any thoughts? It seems my carrier may be getting through or around the filter section? I suppose the problem is there for CW as well...

The CW power is good 5-6 Watts on a 12V battery and my reception is simply great cw and ssb.

Where can I look?

Mike
ab2ts

559. For Sale - Great Value - Accurate Instrument

Yahoo group: mmr40owngrp
Date: 2008-07-22 09:03:28 UTC
From: n8ewy
Topic: 559 Message: 559

I have for sale an LP-100 Digital Vector Wattmeter by N8LP. I am the original owner of this piece. Serial number 340. I assembled it. I packed it up and drove straight to Larry's shack for a greenlight checkup, additional programming and calibration. My experiences with kit construction leading to this project were the construction of a K1, K2/100, KX1, several smaller shack test equipment kits and some SMT work. These kits worked FB for me right off the bench.

Read reviews at:
http://www.telepostinc.com/Telepost.pdf
http://www.eham.net/reviews/detail/5981

Larry's information regarding the Wattmeter:
http://www.telepostinc.com/

View the extensive list of free software available:
http://www.telepostinc.com/LP-100-Update.html

INCLUDED in this package are:

1. LP-100 Digital Vector Wattmeter - assembled and calibrated as of the time of project completion around January 07. Current Firmware version is v.1.1.47.

2. Standard LPC-1 Directional Coupler (1.8-54 MHz) 1500 Watts. 2500W Peak.

3. Connecting cables between coupler and main unit (current and voltage sampling), and power cable with tinned ends for connection to +12VDC.

4. Printed manual.

5. Access to and support for Software pieces, Virtual Control Panel (VCP), Polar Plot and Plot. These programs enhance, tremendously, the already impressive list of functions included with your LP-100. Virtual Control Panel allows you to operate remotely and from your computer and can now be integrated with "TRX-Manager". Of course, technical assistance is available and Larry has always been prompt and thorough in this arena.

6. Buyer will need to supply RS232 cable to connect the LP-100 to his/her computer.

Unit is in excellent condition. Can supply pics if necessary.

LP-100 assembled and calibrated, LPC-1 directional coupler, connecting and power cables and manual - $399. Contact me offline

and we can discuss terms and/or details.

Dohn Smythe
N8ewy@...

560. side tone on mic transmit

Yahoo group: mmr40owngrp
Date: 2008-07-26 15:00:54 UTC
From: stealth49.geo
Topic: 560 Message: 560

Thanks for any suggestion.
Kit went together well. All tuned up per instructions. Made mic from RS parts. It works(ed). I made a contact last weekend.

Now when I key the mic I transmit the CW side tone as well as my mic audio. Have double check mic wiring.

Any help?

Tim
W1WCI

562. Re: side tone on mic transmit

Yahoo group: mmr40owngrp
Date: 2008-07-26 17:28:11 UTC
From: stealth49.geo
Topic: 560 Message: 562

--- In mmr40owngrp@yahoogroups.com, "stealth49.geo" <KB1GFV@...>

Just after posting went down to double double check. Side tone gone.
Keying with mic or paddle (Dit-keys,Dah-side tone) behaves as expected.

Case back together and still working??????????????

Thanks to all.

Tim
W1WCI

563. Re: Can't adjust for zero power with no modulation

Yahoo group: mmr40owngrp
Date: 2008-07-26 20:25:19 UTC
From: r2000spad13
Topic: 558 Message: 563

Problem solved. Moving on to the next issue...

564. Paddles in Addition to Straight Key?

Yahoo group: mmr40owngrp
Date: 2008-07-27 15:45:17 UTC
From: alan_gideon
Topic: 564 Message: 564

Please pardon what may be a terribly simplistic question. The QST article on the MMR-40 used the word "key" in the context of plugging in either a mike or CW key. My (admittedly limited) reading of the schematic seems to show connections for a stereo plug that would accommodate paddles. Does the MMR-40 have a keyer circuit or is the user limited to a straight key? If a keyer circuit, what are its min/max speeds?

Tnx,
Alan KJ4FDG

565. Re: New file uploaded to mmr40owngrp

Yahoo group: mmr40owngrp
Date: 2008-07-27 21:47:39 UTC
From: r2000spad13
Topic: 19 Message: 565

My computer tells me that this file is corrupted. MSWord crashes when
I open it.

--- In mmr40owngrp@yahoogroups.com, mmr40owngrp@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the mmr40owngrp
> group.
>
> File : /Digital Dial and offset.doc
> Uploaded by : rafterdog <JWells6391@...>
> Description : connecting digital dial
>
> You can access this file at the URL:
>
http://groups.yahoo.com/group/mmr40owngrp/files/Digital%20Dial%20and%20offset.doc

>
> To learn more about file sharing for your group, please visit:
> http://help.yahoo.com/help/us/groups/files
>
> Regards,
>
> rafterdog <JWells6391@...>
>

566. RE: [mmr40owngrp] Re: New file uploaded to mmr40owngrp

Yahoo group: mmr40owngrp
Date: 2008-07-27 22:10:24 UTC
From: Rob May
Topic: 19 Message: 566

I can open it with no problems. Might have got corrupted when it was downloaded. Try to download it again.
Rob
NV5E

To: mmr40owngrp@...m
From: sciascia@...
Date: Sun, 27 Jul 2008 21:47:39 +0000
Subject: [mmr40owngrp] Re: New file uploaded to mmr40owngrp

My computer tells me that this file is corrupted. MSWord crashes when

I open it.

--- In mmr40owngrp@yahoogroups.com, mmr40owngrp@yahoogroups.com wrote:

>

>

> Hello,

>

> This email message is a notification to let you know that

> a file has been uploaded to the Files area of the mmr40owngrp

> group.

>

> File : /Digital Dial and offset.doc

> Uploaded by : rafterdog <JWells6391@...>

> Description : connecting digital dial

>

> You can access this file at the URL:

>

http://groups.yahoo.com/group/mmr40owngrp/files/Digital%20Dial%20and%20offset.doc

>

> To learn more about file sharing for your group, please visit:

> http://help.yahoo.com/help/us/groups/files

>

> Regards,

>

> rafterdog <JWells6391@...>

>

_____
Stay in touch when you're away with Windows Live Messenger.
http://www.windowslive.com/messenger/overview.html?ocid=TXT_TAGLM_WL_messenger2_072008

567. Re: Paddles in Addition to Straight Key?

Yahoo group: mmr40owngrp
Date: 2008-07-28 17:54:28 UTC
From: Bruce Beford
Topic: 564 Message: 567

--- In mmr40owngrp@yahoogroups.com, "alan_gideon" <gideonak@...>
wrote:
>
> Please pardon what may be a terribly simplistic question. The QST
> article on the MMR-40 used the word "key" in the context of plugging
> in either a mike or CW key. My (admittedly limited) reading of the
> schematic seems to show connections for a stereo plug that would
> accommodate paddles. Does the MMR-40 have a keyer circuit or is the
> user limited to a straight key? If a keyer circuit, what are its
> min/max speeds?
>
> Tnx,
> Alan KJ4FDG
>

Hi Alan.

As published in Aug 2008 QST, the schematic of the MMR-40 does -not-
include an internal electronic keyer for use with paddles. This was
done primarily to stay within the cost restrictions of the HB design
challenge. The MMR-40 kit sold by Hendrick QRP Kits is the same. (no
internal keyer)

When the MMR-40 detects a mono plug is inserted into the mic jack, it
switches to the CW mode.

Hope this helps.
-Bruce N1RX

568. Re: Paddles in Addition to Straight Key?

Yahoo group: mmr40owngrp
Date: 2008-07-31 20:19:26 UTC
From: Paul Jorgenson
Topic: 564 Message: 568

And, to the other part of your question, yes, the same stereo jack is used for both the mic and the key input. A stereo plug is used for the mic and a mono plug is used for the key (or external keyer).

If you search the messages and the files area, you will see a mod that I did to allow the shorting of the jack, via a switch, when the mic is plugged in - to simulate the mono plug and allow the mic ptt to act as a cw key (works great for adjusting an external antenna tuner).

->Paul KE7HR<-
(more than 1600 miles per watt SSB with my MMR40)

--- In mmr40owngrp@yahoogroups.com, "Bruce Beford" <bruce.beford@...> wrote:
>
> --- In mmr40owngrp@yahoogroups.com, "alan_gideon" <gideonak@>
> wrote:
> >
> > Please pardon what may be a terribly simplistic question. The QST
> > article on the MMR-40 used the word "key" in the context of plugging
> > in either a mike or CW key. My (admittedly limited) reading of the
> > schematic seems to show connections for a stereo plug that would
> > accommodate paddles. Does the MMR-40 have a keyer circuit or is the
> > user limited to a straight key? If a keyer circuit, what are its
> > min/max speeds?
> >
> > Tnx,
> > Alan KJ4FDG
> >
>
> Hi Alan.
>
> As published in Aug 2008 QST, the schematic of the MMR-40 does -not-
> include an internal electronic keyer for use with paddles. This was
> done primarily to stay within the cost restrictions of the HB design
> challenge. The MMR-40 kit sold by Hendrick QRP Kits is the same. (no

> internal keyer)
>
> When the MMR-40 detects a mono plug is inserted into the mic jack,
it
> switches to the CW mode.
>
> Hope this helps.
> -Bruce N1RX
>

569. What's wrong?

Yahoo group: mmr40owngrp
Date: 2008-08-17 13:13:50 UTC
From: bidon_vid
Topic: 569 Message: 569

Hi, here F3GC a bit disappointed with the Tone...
I'll try to explain :
I put V5 off, and I key the TX, as a result the tone sound in the speaker until I put V4 off. (I can also listen to my modulation when using the mike)

I check all the voltages, they are in accordance with the manual for both RX an TX. I did change Q11 without any success, it doesn't cancel completely the signal from U4(1) to U3(2).
So I sent an e-mail to KD1JV at mouse.ncia.net last week, up to now I didn't receive any answer, (may be this e-mail adress is wrong).

Except this trouble, every things seem OK on the kit. I read all the post since the begining of this forum, I never find an answer.

I wonder if some people has experienced such a mess ?

Any Idea?

Robert F3GC

570. RE: [mmr40owngrp] What's wrong?

Yahoo group: mmr40owngrp
Date: 2008-08-17 13:57:18 UTC
From: Bob Miller
Topic: 569 Message: 570

Robert,

Stave's email is "his call sign @ MOOSE, not mouse.

Bob
wb6kwt
-----Original Message-----
From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]On
Behalf Of bidon_vid
Sent: Sunday, August 17, 2008 6:14 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] What's wrong?

Hi, here F3GC a bit disappointed with the Tone...
I'll try to explain :
I put V5 off, and I key the TX, as a result the tone sound in the
speaker until I put V4 off. (I can also listen to my modulation when
using the mike)

I check all the voltages, they are in accordance with the manual for
both RX an TX. I did change Q11 without any success, it doesn't cancel
completely the signal from U4(1) to U3(2).
So I sent an e-mail to KD1JV at mouse.ncia.net last week, up to now I
didn't receive any answer, (may be this e-mail adress is wrong).

Except this trouble, every things seem OK on the kit. I read all the
post since the begining of this forum, I never find an answer.

I wonder if some people has experienced such a mess ?

Any Idea?

Robert F3GC

571. Re: What's wrong?

Yahoo group: mmr40owngrp
Date: 2008-08-17 15:44:37 UTC
From: bidon_vid
Topic: 569 Message: 571

Tnks Bob, I check my e-mail to Steve, in fact I sent it to @MOOSE...
73,
Robert

--- In mmr40owngrp@yahoogroups.com, "Bob Miller" <wb6kwt@...> wrote:
>
> Robert,
>
> Stave's email is "his call sign @ MOOSE, not mouse.
>
> Bob
> wb6kwt
> -----Original Message-----
> From: mmr40owngrp@yahoogroups.com
[mailto:mmr40owngrp@yahoogroups.com]On
> Behalf Of bidon_vid
> Sent: Sunday, August 17, 2008 6:14 AM
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] What's wrong?
>
>
> Hi, here F3GC a bit disappointed with the Tone...
> I'll try to explain :
> I put V5 off, and I key the TX, as a result the tone sound in the
> speaker until I put V4 off. (I can also listen to my modulation
when
> using the mike)
>
> I check all the voltages, they are in accordance with the manual
for
> both RX an TX. I did change Q11 without any success, it doesn't
cancel
> completely the signal from U4(1) to U3(2).
> So I sent an e-mail to KD1JV at mouse.ncia.net last week, up to
now I
> didn't receive any answer, (may be this e-mail adress is wrong).
>
> Except this trouble, every things seem OK on the kit. I read all
the
> post since the begining of this forum, I never find an answer.
>
> I wonder if some people has experienced such a mess ?
>
> Any Idea?
>

> Robert F3GC
>

572. Re: One more mmr40 on the air

Yahoo group: mmr40owngrp
Date: 2008-08-17 16:06:04 UTC
From: bidon_vid
Topic: 490 Message: 572

--- In mmr40owngrp@yahoogroups.com, "f5lct" <f5lct@...> wrote:
>
> Bonjour, so i have finish my mmr 40 and it work's nice some qso this
> week cu2dx , ha contest, ta4cs,....
> nice job with it i'm waiting for the dds fcc2 , but the pto system is
> very stable nice....
> so regards hope one morning one qso with some north america mmr40 user
>
> regards,
> F5LCT
> Hubert
>
Salut Hubert,
pouvez lire mon post 569 sur ce forum, j'ai un problème à résoudre,
73' QRO
Robert, F3GC
robert.cadot@...

573. Re: My MMR40 photo with additional switches

Yahoo group: mmr40owngrp
Date: 2008-08-21 04:17:09 UTC
From: ab2ts
Topic: 224 Message: 573

Hi,

I'm very much interested in how you implemented the power meter.

Please share your idea.

Thanks
Mike
ab2ts

--- In mmr40owngrp@yahoogroups.com, "qrpjl1kra" <mx6s@...> wrote:
>
> Hi again All,
>
> Forgive me to successive posts.
> Recently I am quite busy on weekdays. Weekend is time to post.
> I post several photo to the Photo folder.
>
> http://ph.groups.yahoo.com/group/mmr40owngrp/photos/view/96e3?b=1
> shows my MMR40 front panel.
> Band segment switch is moved to leftside of PTO.
> Additional power meter is installed right.
> I use a modified old YUPITEL microphone to 3.5mm plug.
>
> Tonight its fun to receive China Radio International in
> upper segmant. They say their tooth paste is normal.
>
> Junichi JL1KRA.
>

574. Re: RF Feedback issue on SSB transmit.

Yahoo group: mmr40owngrp
Date: 2008-08-21 04:23:04 UTC
From: ab2ts
Topic: 68 Message: 574

I am having the exact same problem!!!! I did a double take because
your problem description was word for word what I intended to post.

Have you solved the problem? I see you have had no reply's to your
message. This one is a big puzzler for me. I've added bypass
capacitors everywhere with no effect.

Tell me you've figured this one out!!!! I've been struggling for a
few weeks.

Mike
ab2ts

--- In mmr40owngrp@yahoogroups.com, Matthew Schiller <mschiller@...>
wrote:
>
> So I finally got my MMR-40 put together. The receiver is working
great,
> and the transmitter works fine into the dummy load. The trouble starts
> when I actually connect the real antenna. When I key the mic, at first
> there is no power out [expected since I haven't started talking], after
> I say something the power remains at 5watts even when I stop talking.
> [Doesn't seem to be a PTT issue; since release the PTT does return the
> radio to recieve and once there the issue will again repeat it self
on a
> voice peak]. This behavior does not occur when I use the dummy load
> [power out goes to zero with no input]. Not sure I want to know
what my
> transmitted spectrum looked like but despite this I was able to have a
> nice QSO into Virginia [from upstate NY]. Not bad for 5 watts.
>
> The board is still loose in 1/2 of the case and I admit the microphone
> cable and ptt are a bit hacked up [eg the audio cable shield isn't
> continuous between the rig and the microphone because of a splice in
the
> middle]. I suspect that RF is getting back into the microphone input
> somewhere and causing an oscillation to begin.
>
> Any thoughts? Would sure like to have a known working board before
> investing any energy on making a nicer microphone and drilling out the
> case etc.
>
>
> -- Matthew Schiller, KD6BWE
>

575. Re: RF Feedback issue on SSB transmit.

Yahoo group: mmr40owngrp
Date: 2008-08-21 14:31:34 UTC
From: hinojones
Topic: 68 Message: 575

Hi,

I was having the same problem and have had it in the past with other rigs.

Exactly as you describe, I would get clean output into a dummy load, but when transmitting into an aerial through a tuner I would get noise on the output while speaking and often the noisy oscillation would carry on after I stopped speaking.

While trying to sort it out I did discover one thing: it was particularly bad for me when the
tuner was presenting an accurate match - detuning slightly while keeping a reasonable SWR seemed to cure the noise. This was the case with both mag loops and dipoles.

I think (fingers crossed) that I have now cured it. I am not sure which of the following 2 steps was critical or whether it was a blend of the two but here is what I did.

[Note, before trying these things, do make sure that the band pass filter (T2, T3) is peaked
for the correct output frequency - it is *very* easy to peak it up quite a way from 7MHz and get some amount of RF output.]

I don't know any way to do this without an oscilloscope and a two tone test generator, but I just use a cheap, surplus equipment 'scope and a little home built test generator that mixes together 2 equal amplitude audio signals (one at 725Hz, one at 1590Hz)

First connect a dummy load, tune to the middle of the frequency segment you are interested in, connect the 'scope across the dummy load and set the timebase up for looking at audio signals. Connect the 2 tone test generator to the mic input, key the transmitter and check the output. Hopefully you'll get the classic two tone envelope (see figure 1 here: http://w4neq.com/ssb_im.pdf, for example). If not, adjust the bfo (C21) trimmer until you do.

With the bfo set correctly, I also fine tuned the PA bias (V3) but heed very carefully the warning in the manual about not increasing it too much (and preferably using a fuse in the TCVR power lead). Connect an ammeter inline and repeat the bias setting procedure detailed in the manual. Next, remove the dummy load and connect an aerial via a tuner, connect the 'scope across the rig output, leave the two tone generator connected and key the transmitter. Adjust the tuner for the best match you can get (quickly - you're on air) and take a look at the trace on the scope. If it matches the expected envelope as you adjust the aerial tuner then everything is likely to be OK. In my case it would start to show
some noise as I tuned close to a perfect match, but a small tweak to the PA bias (keep watching the ammeter) seemed to cure it.

BTW, I also suspected RF getting in through mic leads etc. but that didn't seem to be the case: I have an RF-tight metal box with a BNC connector for testing stuff in screened conditions. I put the rig, mic and a battery in the screened box and checked the signal

transmitted into an aerial: it still had noisy oscillations before I got everything aligned.

I hope that helps a bit. I would also be interested to hear if anyone else has had similar issues and how they cured them.

Cheers,
Brian, G1ZEZ

--- In mmr40owngrp@yahoogroups.com, "ab2ts" <sciascia@...> wrote:
>
> I am having the exact same problem!!!! I did a double take because
> your problem description was word for word what I intended to post.
>
> Have you solved the problem? I see you have had no reply's to your
> message. This one is a big puzzler for me. I've added bypass
> capacitors everywhere with no effect.
>
> Tell me you've figured this one out!!!! I've been struggling for a
> few weeks.
>
> Mike
> ab2ts
>
>
>
> --- In mmr40owngrp@yahoogroups.com, Matthew Schiller <mschiller@>
> wrote:
> >
> > So I finally got my MMR-40 put together. The receiver is working
> great,
> > and the transmitter works fine into the dummy load. The trouble starts
> > when I actually connect the real antenna. When I key the mic, at first
> > there is no power out [expected since I haven't started talking], after
> > I say something the power remains at 5watts even when I stop talking.
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> > voice peak]. This behavior does not occur when I use the dummy load
> > [power out goes to zero with no input]. Not sure I want to know
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> > transmitted spectrum looked like but despite this I was able to have a
> > nice QSO into Virginia [from upstate NY]. Not bad for 5 watts.
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> > The board is still loose in 1/2 of the case and I admit the microphone
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> > continuous between the rig and the microphone because of a splice in
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> > middle]. I suspect that RF is getting back into the microphone input
> > somewhere and causing an oscillation to begin.
> >

> > Any thoughts? Would sure like to have a known working board before
> > investing any energy on making a nicer microphone and drilling out the
> > case etc.
> >
> >
> > -- Matthew Schiller, KD6BWE
> >
>

576. Re: RF Feedback issue on SSB transmit.

Yahoo group: mmr40owngrp
Date: 2008-08-21 14:36:10 UTC
From: hinojones
Topic: 68 Message: 576

Sorry.. the comma gets read with the link.

See figure 1 here:

http://w4neq.com/ssb_im.pdf

--- In mmr40owngrp@yahoogroups.com, "hinojones" <brian.jones@...> wrote:
>
> Hi,
>
> I was having the same problem and have had it in the past with other rigs.
>
> Exactly as you describe, I would get clean output into a dummy load, but when
> transmitting into an aerial through a tuner I would get noise on the output while
speaking
> and often the noisy oscillation would carry on after I stopped speaking.
>
> While trying to sort it out I did discover one thing: it was particularly bad for me when
the
> tuner was presenting an accurate match - detuning slightly while keeping a reasonable
> SWR seemed to cure the noise. This was the case with both mag loops and dipoles.
>
> I think (fingers crossed) that I have now cured it. I am not sure which of the following
2
> steps was critical or whether it was a blend of the two but here is what I did.
>
> [Note, before trying these things, do make sure that the band pass filter (T2, T3) is
peaked
> for the correct output frequency - it is *very* easy to peak it up quite a way from 7MHz
> and get some amount of RF output.]
>
> I don't know any way to do this without an oscilloscope and a two tone test generator,
but
> I just use a cheap, surplus equipment 'scope and a little home built test generator that
> mixes together 2 equal amplitude audio signals (one at 725Hz, one at 1590Hz)
>
> First connect a dummy load, tune to the middle of the frequency segment you are
> interested in, connect the 'scope across the dummy load and set the timebase up for
> looking at audio signals. Connect the 2 tone test generator to the mic input, key the
> transmitter and check the output. Hopefully you'll get the classic two tone envelope (see
> figure 1 here: http://w4neq.com/ssb_im.pdf, for example). If not, adjust the bfo (C21)
> trimmer until you do.
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> With the bfo set correctly, I also fine tuned the PA bias (V3) but heed very carefully
the
> warning in the manual about not increasing it too much (and preferably using a fuse in

> the TCVR power lead). Connect an ammeter inline and repeat the bias setting procedure
> detailed in the manual. Next, remove the dummy load and connect an aerial via a tuner,
> connect the 'scope across the rig output, leave the two tone generator connected and
key
> the transmitter. Adjust the tuner for the best match you can get (quickly - you're on
air)
> and take a look at the trace on the scope. If it matches the expected envelope as you
> adjust the aerial tuner then everything is likely to be OK. In my case it would start to
show
> some noise as I tuned close to a perfect match, but a small tweak to the PA bias (keep
> watching the ammeter) seemed to cure it.
>
> BTW, I also suspected RF getting in through mic leads etc. but that didn't seem to be the
> case: I have an RF-tight metal box with a BNC connector for testing stuff in screened
> conditions. I put the rig, mic and a battery in the screened box and checked the signal
> transmitted into an aerial: it still had noisy oscillations before I got everything
aligned.
>
> I hope that helps a bit. I would also be interested to hear if anyone else has had
similar
> issues and how they cured them.
>
> Cheers,
> Brian, G1ZEZ
>
>
>
> --- In mmr40owngrp@yahoogroups.com, "ab2ts" <sciascia@> wrote:
> >
> > I am having the exact same problem!!!! I did a double take because
> > your problem description was word for word what I intended to post.
> >
> > Have you solved the problem? I see you have had no reply's to your
> > message. This one is a big puzzler for me. I've added bypass
> > capacitors everywhere with no effect.
> >
> > Tell me you've figured this one out!!!! I've been struggling for a
> > few weeks.
> >
> > Mike
> > ab2ts
> >
> >
> >
> > --- In mmr40owngrp@yahoogroups.com, Matthew Schiller <mschiller@>
> > wrote:
> > >
> > > So I finally got my MMR-40 put together. The receiver is working
> > great,
> > > and the transmitter works fine into the dummy load. The trouble starts

> > > when I actually connect the real antenna. When I key the mic, at first
> > > there is no power out [expected since I haven't started talking], after
> > > I say something the power remains at 5watts even when I stop talking.
> > > [Doesn't seem to be a PTT issue; since release the PTT does return the
> > > radio to recieve and once there the issue will again repeat it self
> > on a
> > > voice peak]. This behavior does not occur when I use the dummy load
> > > [power out goes to zero with no input]. Not sure I want to know
> > what my
> > > transmitted spectrum looked like but despite this I was able to have a
> > > nice QSO into Virginia [from upstate NY]. Not bad for 5 watts.
> > >
> > > The board is still loose in 1/2 of the case and I admit the microphone
> > > cable and ptt are a bit hacked up [eg the audio cable shield isn't
> > > continuous between the rig and the microphone because of a splice in
> > the
> > > middle]. I suspect that RF is getting back into the microphone input
> > > somewhere and causing an oscillation to begin.
> > >
> > > Any thoughts? Would sure like to have a known working board before
> > > investing any energy on making a nicer microphone and drilling out the
> > > case etc.
> > >
> > >
> > > -- Matthew Schiller, KD6BWE
> > >
> >
>

577. Getting back into the hobby

Yahoo group: mmr40owngrp
Date: 2008-08-22 10:46:24 UTC
From: flyboy_ont
Topic: 577 Message: 577

It's been a long time since I last operated, since 1977-1981 ex-VE4ADB.I got married, bought a house and had a family. Everything I had was either sold or given away. To this day I only have a DVM. I've been surfing a lot in the last couple months reading up on the hobby and have things changed a lot since 1981. I am interested in getting back into the hobby and have been looking at QRP rigs, particularly Hendricks MMR-40. I would like opinions on this rig, likes, dislikes and what mods are out there for this rig. If I pick one up I definetly would like a digital frequency display.

Thanks in advance.

578. Re: RF Feedback issue on SSB transmit.

Yahoo group: mmr40owngrp
Date: 2008-08-24 22:37:16 UTC
From: ab2ts
Topic: 68 Message: 578

Hi all,

I managed to "resolve" the problem not solve it.

A choke balun right at the transmitter did the trick. I tried a big multi-loop coax choke and a 1:1 current balun made of 10 turns of RG-174 around a FT-114-43 toroid. Both did the job.

See http://www.io.com/%7En5fc/balun_1-1.htm

Interestingly, once I had the problem licked, I re-tweeked and aligned my MMR40. I managed to get just over 8 Watts as I fine tuned the PI filter. But at this power level the oscillation returned even if I transmitted into a dummy load.

At this point I backed off the bias just a tad and the oscillation went away. (I did this blind, I was operating around 20 mA bias. I have not remeasured the bias but it is probably around 15 mA. I barely nudged the bias pot.)

Now I am running about 7.5 Watts and it is stable when I use the choke balun at the output of the TX.

I did try an internal choke balun. I made one from a FT-50-43 toroid with 10 bifilar turns. It did not do the trick.

The 1:1 current balun will become a permanent fixture to the MMR40

579. Finished Finally!

Yahoo group: mmr40owngrp
Date: 2008-08-25 05:17:02 UTC
From: ab2ts
Topic: 579 Message: 579

I just posted pictures of my MMR40+.

Made my first contact Nov 2007 and finally finished boxing it up this weekend.

I added an ICOM mic jack and a speaker phone mic jack. Also added a microphone gain/cw drive control.

The digital dial is easy to build, install and calibrate. The LED bargraph power meter is nice but I'm not sure it was worth the effort.

Just made a contact to Bridgeport, WA from Livermore, CA on 7283 kHz.

The biggest problem I had was the RF induced feedback that I described in my earlier post this weekend.

72

Mike
ab2ts

580. added a brass spring to pto spring

Yahoo group: mmr40owngrp
Date: 2008-08-30 17:44:35 UTC
From: Ray Bossert
Topic: 580 Message: 580
Attachments: 1 described; binary payloads are missing from this source WARC

I have added a spring brass strip to chassis and had it apply pressure to the PTO screw. This gave good stability to the VFO. See attached picture . Have built this rig about a year ago and it works great.

581. Old Mail from the List

Yahoo group: mmr40owngrp
Date: 2008-11-01 01:58:51 UTC
From: Steven Read
Topic: 581 Message: 581

I just purchased a MMR-40 and will be needing all the information I can get. Does anybody have a good collection of the mail for this list in mbox or eml format? I would like to import the mail into Thunderbird.

Thirty-five years ago I could build simple Heathkits but am very much out of practice.

Steven Read - ab9ol

582. mmr40 sales?

Yahoo group: mmr40owngrp
Date: 2008-11-05 23:13:52 UTC
From: veli ihsan serin
Topic: 582 Message: 582

i want to buy builded and tested MMR40? is it possible?

73
tb8cia,veli

583. Re: [mmr40owngrp] mmr40 sales?

Yahoo group: mmr40owngrp
Date: 2008-11-05 23:15:57 UTC
From: bob bailey
Topic: 582 Message: 583

sure, I have one that performs great, and I might think about selling it too.

bob
WB7DMX

From: veli ihsan serin
Sent: Wednesday, November 05, 2008 6:13 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] mmr40 sales?

i want to buy builded and tested MMR40? is it possible?

73
tb8cia,veli

584. Re: mmr40 sales?

Yahoo group: mmr40owngrp
Date: 2008-11-05 23:22:08 UTC
From: veli ihsan serin
Topic: 582 Message: 584

pls send to me price information? and paypal account. my e-mail
serin@silifke.net

--- In mmr40owngrp@yahoogroups.com, "bob bailey" <wb7dmx@...> wrote:
>
> sure, I have one that performs great, and I might think about
selling it too.
>
> bob
> WB7DMX
>
>
> From: veli ihsan serin
> Sent: Wednesday, November 05, 2008 6:13 PM
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] mmr40 sales?
>
>
> i want to buy builded and tested MMR40? is it possible?
>
> 73
> tb8cia,veli
>

585. Re: [mmr40owngrp] Re: mmr40 sales?

Yahoo group: mmr40owngrp
Date: 2008-11-05 23:29:24 UTC
From: bob bailey
Topic: 582 Message: 585

just as another option for you,
you could order a new one from qrp kits and have it sent to me, and I will build it and test it, then ship it to you.

do you think you may want to do it that way ?
then you will have the new case and digital display also.

I have been building many qrp kits for hams that have physical problems and can't build them, all I ask for is the shipping cost and a bit for my time.

bob
WB7DMX

From: veli ihsan serin
Sent: Wednesday, November 05, 2008 6:22 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: mmr40 sales?

pls send to me price information? and paypal account. my e-mail
serin@...

--- In mmr40owngrp@yahoogroups.com, "bob bailey" <wb7dmx@...> wrote:
>
> sure, I have one that performs great, and I might think about
selling it too.
>
> bob
> WB7DMX
>
>
> From: veli ihsan serin
> Sent: Wednesday, November 05, 2008 6:13 PM
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] mmr40 sales?
>
>
> i want to buy builded and tested MMR40? is it possible?
>
> 73
> tb8cia,veli
>

586. Differences Between Versions, Advice and Mail Archive

Yahoo group: mmr40owngrp
Date: 2008-11-07 05:18:37 UTC
From: Steven Read
Topic: 586 Message: 586

As of today I have a box of parts that, with a lot of luck, will result in a MMR-40 and will take all the advice I can get because this is "well above my pay grade" (skill level.)

The manual I have is for version A. What is the difference between this version and version B?

Any suggestions and warnings would be appreciated.

Finally, does anyone have most or all of the mail in this group in EML, mbox or some other format that I can import into T-Bird? I know a lot of the recent ones are available on the Yahoo! page for this group but accessing them is awkward compared using a mail reader.

587. mmr40 sales?

Yahoo group: mmr40owngrp
Date: 2008-11-07 06:36:13 UTC
From: shubham tiwari
Topic: 582 Message: 587

hello there ,,, can any one built a bitx 20m qrp transceiver from
http://www.cqbitx.blogspot.com/
for me ???
as i am new to ham...and i dont have the right equipments with me....
thanks
shubham
india
shubhamforme@...

588. MMR-40 enclosure by qrpkits wiring mic and key

Yahoo group: mmr40owngrp
Date: 2008-11-09 18:43:34 UTC
From: stealth49.geo
Topic: 588 Message: 588

Not as clear as it ought to be. never got the key connector working.
I have removed all key connections.
Now on paddle (in mic jack) dit mutes receiver, dash produces click.
No power out. Now wired up like original...was working...shorted
something?????
Any help were to look?
After return of side tone maybe we can wire the other jack!

Tim
W1WCI

589. PTO troubles :(

Yahoo group: mmr40owngrp
Date: 2008-11-12 16:02:35 UTC
From: JShroomy
Topic: 589 Message: 589

Greetings group.
I just started on my MMR40. Rather than purchase the kit, I went in on a group buy of parts, and etched the board myself.

I've inspected the board, and verified all the traces are in good shape, and no shorts to ground.
I used the PCB design from Steve's site.

I have only assembled the PTO so far, as I prefer the build and test method. No oscillation. (Verified with RF probe, freq counter, and shortwave)
After reading all the other posts, I see that L2 has been a common problem. I have tried every combination with L2. (Flipped it around, rewound it, wound it a different direction... every possible configuration I could come up with).
I have also rewound L1 in a different direction just in case.

I have verified with the schematic that everything goes where it is supposed to.
Testing proves that Q14 is getting 5v, and no matter which way the l2 is turned, I get .76v @ the S of Q14.

I don't have another J310 to swap with, so I tried a MPF102 that I had on hand, and that gives me 1.15 @ S and no oscillation.
Is a mpf102 a suitable substitution if I change a value somewhere else?
... I'm so bummed out to be stuck at the earliest stage of this.
Such a blow to my hamhood.
Thanks for any help.

James Shrum
AB9LM

590. Re: [mmr40owngrp] PTO troubles :(

Yahoo group: mmr40owngrp
Date: 2008-11-12 19:21:39 UTC
From: James Shrum
Topic: 589 Message: 590

All. On a just for hi hi's, i decided to switch the primary winding of
L2. Front to back, etc ...
It is no longer soldered in the way the pins come down, but voila....
oscillation. I'm measuring .3v at S. I'm high in frequency, but I'll
work that out. At least I know my J310 is good ... looks like
somethings funny w/ L2 after all.

I dunno ...

Thanks for reviewing this. Hope I'll have it good from here.

AB9LM

On Wed, Nov 12, 2008 at 10:02 AM, JShroomy <jshroomy@...> wrote:
> Greetings group.
> I just started on my MMR40. Rather than purchase the kit, I went in on
> a group buy of parts, and etched the board myself.
>
> I've inspected the board, and verified all the traces are in good
> shape, and no shorts to ground.
> I used the PCB design from Steve's site.
>
> I have only assembled the PTO so far, as I prefer the build and test
> method. No oscillation. (Verified with RF probe, freq counter, and
> shortwave)
> After reading all the other posts, I see that L2 has been a common
> problem. I have tried every combination with L2. (Flipped it around,
> rewound it, wound it a different direction... every possible
> configuration I could come up with).
> I have also rewound L1 in a different direction just in case.
>
> I have verified with the schematic that everything goes where it is
> supposed to.
> Testing proves that Q14 is getting 5v, and no matter which way the l2
> is turned, I get .76v @ the S of Q14.
>
> I don't have another J310 to swap with, so I tried a MPF102 that I had
> on hand, and that gives me 1.15 @ S and no oscillation.
> Is a mpf102 a suitable substitution if I change a value somewhere else?
> ... I'm so bummed out to be stuck at the earliest stage of this.
> Such a blow to my hamhood.
> Thanks for any help.
>
> James Shrum
> AB9LM
>

>

591. No sidetone and some other ?'s

Yahoo group: mmr40owngrp
Date: 2008-11-19 16:35:32 UTC
From: JShroomy
Topic: 591 Message: 591

Hello all.
I completed building the radio the other night, tweaked some things, and now I have what I would consider a good receiver.
I've not installed the irf510 yet, as I'm a little stuck on the initial xmitter alignment.

I have a straight key plugged in, and I'm not hearing any sidetone at all. I can hear it switch from rx to tx, but no tone at all. I've adjusted all the trimmers to no avail. Following the guide, I checked all voltages of the U's and Q's, and everything is checking out ok.
I have probed around w/ an amplified speaker to see if I could pick up some tone somewhere, but no.
When I key up the radio to a nearby receiver, I am receiving a clean clear CW note.

Can you give me any pointers on where I might test next?

Also, during band peaking, no matter how I tweak the IF cans, I can not get my PA gate voltage above 3.2v. I'm reading I should see more like 7 or so.
Where might I go next to check this?

And last issue, or maybe not even...
On RX, with volume all the way up, with no antenna connected, the hiss is very silent. After connecting an antenna, it seems a decent volume with what I'd call acceptable sensitivity. Is this typical?

Thanks very much in advance. I'm really looking forward to getting on the air. I've been without a rig for a very long time, and am absolutely dying to get back on the air.

Jim Shrum
AB9LM

592. Looking for MMR-40 Builder

Yahoo group: mmr40owngrp
Date: 2008-11-20 17:34:22 UTC
From: kb4hg
Topic: 592 Message: 592

I am looking for someone that would be willing to build a new MMR-40 (new case) that I just received from Doug. I would like to have it back ASAP, in kit building terms completed by Q1,
2009. I am willing to pay a reasonable fee for this service.

Any takers?

72,
Rhett, KB4HG
Sanford, NC
risley@ipass.net

593. Re: [mmr40owngrp] Looking for MMR-40 Builder

Yahoo group: mmr40owngrp
Date: 2008-11-20 19:15:58 UTC
From: Dick
Topic: 592 Message: 593
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

594. Re: No sidetone and some other ?'s

Yahoo group: mmr40owngrp
Date: 2008-11-20 22:47:59 UTC
From: Bruce Beford
Topic: 591 Message: 594

--- In mmr40owngrp@yahoogroups.com, "JShroomy" <jshroomy@...> wrote:
>
> Hello all.
> I completed building the radio the other night, tweaked some things,
> and now I have what I would consider a good receiver.
> I've not installed the irf510 yet, as I'm a little stuck on the
> initial xmitter alignment.
>
> I have a straight key plugged in, and I'm not hearing any sidetone
at
> all. I can hear it switch from rx to tx, but no tone at all. I've
> adjusted all the trimmers to no avail. Following the guide, I
checked
> all voltages of the U's and Q's, and everything is checking out ok.
> I have probed around w/ an amplified speaker to see if I could pick
up
> some tone somewhere, but no.
> When I key up the radio to a nearby receiver, I am receiving a clean
> clear CW note.
>
> Can you give me any pointers on where I might test next?
>

Hi Jim.

It's been a while since I built mine, but...
You mentioned that you have hooked up a straight key, but get no
sidetone. However, the rig is transmitting.

By any chance, did you use a mono or stereo plug on your staight key?
The MMR-40 needs to see a mono plug short out the ring and sleeve
connections on the jack to put it into CW mode. If not in CW mode, no
sidetone will be generated. But, you _may_ still hear what sounds
like CW on a receiver due to carrier leakage, until you get the
transmitter adjusted.

GL es 72/73,
Bruce N1RX

595. Re: [mmr40owngrp] Re: No sidetone and some other ?'s

Yahoo group: mmr40owngrp
Date: 2008-11-21 02:15:53 UTC
From: James Shrum
Topic: 591 Message: 595

That's a very good observation Bruce.
However, rather than an actual straight key, I was just using a mono plug w/ the screw on housing removed. (I was just bending the connections together to create the short. So its definitely a mono plug.
That's a good point about the "CW" that I think I'm hearing on the receiver may just be carrier leaking through. I suppose I could throw on a microphone to see if the SSB side will work? At least rule that part out for now, then if it does, then I know I just have a problem w/ the tone generation. Which I assume will be much easier to resolve.

Thanks for the reply Bruce. I figured this was a somewhat dead message board. I wish I had built this last year.

Jim
AB9LM

On Thu, Nov 20, 2008 at 4:47 PM, Bruce Beford <bruce.beford@...> wrote:
> --- In mmr40owngrp@yahoogroups.com, "JShroomy" <jshroomy@...> wrote:
>>
>> Hello all.
>> I completed building the radio the other night, tweaked some things,
>> and now I have what I would consider a good receiver.
>> I've not installed the irf510 yet, as I'm a little stuck on the
>> initial xmitter alignment.
>>
>> I have a straight key plugged in, and I'm not hearing any sidetone
> at
>> all. I can hear it switch from rx to tx, but no tone at all. I've
>> adjusted all the trimmers to no avail. Following the guide, I
> checked
>> all voltages of the U's and Q's, and everything is checking out ok.
>> I have probed around w/ an amplified speaker to see if I could pick
> up
>> some tone somewhere, but no.
>> When I key up the radio to a nearby receiver, I am receiving a clean
>> clear CW note.
>>
>> Can you give me any pointers on where I might test next?
>>
>
> Hi Jim.
>
> It's been a while since I built mine, but...
> You mentioned that you have hooked up a straight key, but get no
> sidetone. However, the rig is transmitting.

>
> By any chance, did you use a mono or stereo plug on your staight key?
> The MMR-40 needs to see a mono plug short out the ring and sleeve
> connections on the jack to put it into CW mode. If not in CW mode, no
> sidetone will be generated. But, you _may_ still hear what sounds
> like CW on a receiver due to carrier leakage, until you get the
> transmitter adjusted.
>
> GL es 72/73,
> Bruce N1RX
>
>

596. Re: [mmr40owngrp] Re: No sidetone and some other ?'s

Yahoo group: mmr40owngrp
Date: 2008-11-22 01:34:42 UTC
From: James Shrum
Topic: 591 Message: 596

For the record:

Hello again.
Ok. After some encouragement to recheck everything I did find some issues.

Following the board layout from Steve's site, I discovered that the
values for R37 and R39 were reversed. I also found an issue on the PCB
print that caused a grounded island to have no continuity from ground.

First I corrected the ground, and it didn't fix the sidetone. But
obviously it was something that needed to be fixed.
After comparing all the components in the tone generator, is when I
found R37 and R39.
After swapping them out ... The beautiful 600hz tone that we've all
grown to love came singing from the speaker.
I'm very happy.

So now, I'll do some tweaking and see where I end up next.

Thanks again for all the help and suggestions.

Jim
AB9LM

On Thu, Nov 20, 2008 at 8:15 PM, James Shrum <jshroomy@...> wrote:
> That's a very good observation Bruce.
> However, rather than an actual straight key, I was just using a mono
> plug w/ the screw on housing removed. (I was just bending the
> connections together to create the short. So its definitely a mono
> plug.
> That's a good point about the "CW" that I think I'm hearing on the
> receiver may just be carrier leaking through. I suppose I could throw
> on a microphone to see if the SSB side will work? At least rule that
> part out for now, then if it does, then I know I just have a problem
> w/ the tone generation. Which I assume will be much easier to resolve.
>
> Thanks for the reply Bruce. I figured this was a somewhat dead message
> board. I wish I had built this last year.
>
> Jim
> AB9LM
>
> On Thu, Nov 20, 2008 at 4:47 PM, Bruce Beford <bruce.beford@...> wrote:
>> --- In mmr40owngrp@yahoogroups.com, "JShroomy" <jshroomy@...> wrote:
>>>
>>> Hello all.
>>> I completed building the radio the other night, tweaked some things,

>>> and now I have what I would consider a good receiver.
>>> I've not installed the irf510 yet, as I'm a little stuck on the
>>> initial xmitter alignment.
>>>
>>> I have a straight key plugged in, and I'm not hearing any sidetone
>> at
>>> all. I can hear it switch from rx to tx, but no tone at all. I've
>>> adjusted all the trimmers to no avail. Following the guide, I
>> checked
>>> all voltages of the U's and Q's, and everything is checking out ok.
>>> I have probed around w/ an amplified speaker to see if I could pick
>> up
>>> some tone somewhere, but no.
>>> When I key up the radio to a nearby receiver, I am receiving a clean
>>> clear CW note.
>>>
>>> Can you give me any pointers on where I might test next?
>>>
>>
>> Hi Jim.
>>
>> It's been a while since I built mine, but...
>> You mentioned that you have hooked up a straight key, but get no
>> sidetone. However, the rig is transmitting.
>>
>> By any chance, did you use a mono or stereo plug on your staight key?
>> The MMR-40 needs to see a mono plug short out the ring and sleeve
>> connections on the jack to put it into CW mode. If not in CW mode, no
>> sidetone will be generated. But, you _may_ still hear what sounds
>> like CW on a receiver due to carrier leakage, until you get the
>> transmitter adjusted.
>>
>> GL es 72/73,
>> Bruce N1RX
>>
>>
>

597. Low rf drive

Yahoo group: mmr40owngrp
Date: 2008-11-29 16:34:13 UTC
From: miketa_us
Topic: 597 Message: 597

Hello to the group, and Happy Thanksgiving weekend!

I am building an MMR-40 from the plans posted on Steve's website.

My dumb question is regarding T1,T2 and T3. Are the capacitors in
the base of these three transformers to be left in or snipped out?

Reason I ask is the schematic shows no capacitor across T1 pins 1
and 3.
T2 and T3 have 47pF caps(C31 & C35) added across their respective
pins 1 & 3. Are those in addition to their internal caps?

Thank you in advance.

Regards,
Mike n2eab

598. Re: [mmr40owngrp] Low rf drive

Yahoo group: mmr40owngrp
Date: 2008-11-30 05:25:04 UTC
From: Ray Bossert
Topic: 597 Message: 598

Mike
Your question is not dumb. The answer is do not remove the capacitors from the 3 IF transformer (T1,T2 and T3). These are 10.7 mhz transformers. The frequency that must be past thought them is 7 mhz that is why 47 pf capacitors are added across T2 and T3 so they will tune down to 7mhz. transistor Q4 adds capacity across T1 so no added capacitor is needed to tune down to 7mhz. Hope this a help I built one about six
months ago and it works just fine. Ray AI4DU.

\\\
----- Original Message -----
From: miketa_us
To: mmr40owngrp@yahoogroups.com
Sent: Saturday, November 29, 2008 11:34 AM
Subject: [mmr40owngrp] Low rf drive

Hello to the group, and Happy Thanksgiving weekend!

I am building an MMR-40 from the plans posted on Steve's website.

My dumb question is regarding T1,T2 and T3. Are the capacitors in
the base of these three transformers to be left in or snipped out?

Reason I ask is the schematic shows no capacitor across T1 pins 1
and 3.
T2 and T3 have 47pF caps(C31 & C35) added across their respective
pins 1 & 3. Are those in addition to their internal caps?

Thank you in advance.

Regards,
Mike n2eab

599. Re: Low rf drive

Yahoo group: mmr40owngrp
Date: 2008-11-30 15:56:37 UTC
From: miketa_us
Topic: 597 Message: 599

Thank you for your reply Ray. I pretty much have a functional transceiver at this point but have been struggling to figure out why the rf drive is about half of what is expected.

Using an rf probe & DVM, the voltage measured at Q9 collector is 7V and 3.5V at the Q10 gate, which should be about 8v. I've wound & rewound T4 as outlined in the instructions and triple checked its installation and am fairly certain it is ok. Not sure if halving power is a normal characteristic of T4, but if it is then I have to look at the Q9 collector voltage as needing to be twice as high.

Wondering if you could help me troubleshoot by measuring the rf voltages at the Q9 base and collector and Q19 gate of your mmr-40.

Regards,
Mike n2eab

--- In mmr40owngrp@yahoogroups.com, "Ray Bossert" <ai4du@...> wrote:
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> Your question is not dumb. The answer is do not remove the capacitors from the 3 IF transformer (T1,T2 and T3). These are 10.7 mhz transformers. The frequency that must be past thought them is 7 mhz that is why 47 pf capacitors are added across T2 and T3 so they will tune down to 7mhz. transistor Q4 adds capacity across T1 so no added capacitor is needed to tune down to 7mhz. Hope this a help I built one about six
> months ago and it works just fine. Ray AI4DU.
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> \\\
> ----- Original Message -----
> From: miketa_us
> To: mmr40owngrp@yahoogroups.com
> Sent: Saturday, November 29, 2008 11:34 AM
> Subject: [mmr40owngrp] Low rf drive
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> pins 1 & 3. Are those in addition to their internal caps?
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> Thank you in advance.
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> Regards,
> Mike n2eab
>

600. Re: [mmr40owngrp] Re: Low rf drive

Yahoo group: mmr40owngrp
Date: 2008-12-01 16:32:02 UTC
From: Ray Bossert
Topic: 597 Message: 600

Hi Mike
I will check the voltages that you ask but can not do that for a few days as my work bench is filled up with some repairs and I will have to take my mmr40 out the cabinet. Mike what I was wondering since your first question was about T2 and T3 have you adjusted them to 7 MHZ that is very important. T4 is a broadband transformer and I would only think of that been the problem as a last resort. Follow the instructions on page 13 of the manual for the ajustment of T2 an T3. If this is a help please let me know OK Mike
73's for now Ray AI4DU
----- Original Message -----
From: miketa_us
To: mmr40owngrp@yahoogroups.com
Sent: Sunday, November 30, 2008 10:56 AM
Subject: [mmr40owngrp] Re: Low rf drive

Thank you for your reply Ray. I pretty much have a functional transceiver at this point but have been struggling to figure out why the rf drive is about half of what is expected.

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601. Re: [mmr40owngrp] Re: Low rf drive

Yahoo group: mmr40owngrp
Date: 2008-12-02 00:21:18 UTC
From: Michael Ardovino
Topic: 597 Message: 601

I've tweaked T2 & T3 and only can get a maximum of 3.38V at the gate of Q10. The slugs in the transformers are about in the center of their range of travel. So i'm guessing they are adjusted for 7MHz. Q10 amplifies this to about 10V which calculates to almost 2W at the antenna jack. Far less than what it should be. The output at the antenna is sinusoidal and the cw & ssb signals sound good into another receiver.

At your convenience, if you could measure your input /output of Q9 & gate of Q10, it would be a good comparison as to where I should focus troubleshooting.

Mike

--- On Mon, 12/1/08, Ray Bossert <ai4du@...> wrote:

From: Ray Bossert ai4du@atmc.net
Subject: Re: [mmr40owngrp] Re: Low rf drive
To: mmr40owngrp@yahoogroups.com
Date: Monday, December 1, 2008, 11:32 AM

Hi Mike
         I will check the voltages that you ask but can not do that for a few days as my work bench is filled up with some repairs and I will have to take my mmr40 out the cabinet. Mike what I was wondering since your first question was about T2 and T3 have you adjusted them to 7 MHZ that is very important. T4 is a broadband transformer and I would only think of that been the problem as a last resort. Follow the instructions on page 13 of the manual for the ajustment of T2 an T3. If this is a help please let me know OK
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                                        73's for now Ray AI4DU

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Wondering if you could help me troubleshoot by measuring the rf voltages at the Q9 base and collector and Q19 gate of your mmr-40.

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> Regards,
> Mike n2eab
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602. Re: [mmr40owngrp] Re: Low rf drive

Yahoo group: mmr40owngrp
Date: 2008-12-02 02:08:30 UTC
From: James Shrum
Topic: 597 Message: 602

Mike,
You and I built the MMR via the same source. Its interesting that we
have the exact same problem. I've not compared the entire schematic to
PCB junction by junction. Have you done this by chance?
Also, out of curiosity, how are you measuring your gate voltage and
final RF output?
My readings were very comparable to yours. Same gate, same final
output when measured with a diode probe.
When tested with the KD1JV swr/power meter it showed me about 5-6
watts output. This was very confusing to me... I've not had time to
investigate further, but I believe I was using the V*V/100 for one
probe, and the design was intended for V*V/50 ... but I'm not sure.

On Mon, Dec 1, 2008 at 6:21 PM, Michael Ardovino <miketa_us@...> wrote:
> I've tweaked T2 & T3 and only can get a maximum of 3.38V at the gate of Q10.
> The slugs in the transformers are about in the center of their range of
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> about 10V which calculates to almost 2W at the antenna jack. Far less than
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> At your convenience, if you could measure your input /output of Q9 & gate of
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> Mike
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> --- On Mon, 12/1/08, Ray Bossert <ai4du@...> wrote:
>
> From: Ray Bossert ai4du@...
> Subject: Re: [mmr40owngrp] Re: Low rf drive
> To: mmr40owngrp@yahoogroups.com
> Date: Monday, December 1, 2008, 11:32 AM
>
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> question was about T2 and T3 have you adjusted them to 7 MHZ that is very
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> Regards,
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>> Thank you in advance.
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>> Regards,
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>

603. Re: Low rf drive

Yahoo group: mmr40owngrp
Date: 2008-12-03 03:30:58 UTC
From: miketa_us
Topic: 597 Message: 603

Hi James,

Ah yes, the trials and tribulations of scratch building.

I've checked most of the pcb against the schematic and found two differences, particularly in the lower left quadrant. As you are aware there were a few floating pads on the pcb which required grounding.

There was the placement of R12 which had me scrutinizing that section of the circuit, the way the pcb is laid out differs from the schematic, then a comparison against KD1JV's ugly construction layout showed that his wiring mostly matched the schematic, so I modified my pcb to match too. Actually didn't see any performance difference from the original layout to my modified version.

(I had a leaky Q8 transistor that kept me busy troubleshooting the T/R ckts for a couple of evenings)

The schematic seems to have an error in the side tone circuit. It shows connectivity of R32 to R31/R35/C69/C70 junction, which results in no tone generation. Our pcb has the aforementioned junction broken and R32(as viewed from the schematic) connecting to the base of Q13, which results in a tone. To confuse things a bit, R32 & C66 are swapped in physical location on the pcb from the schematic, but electrically & functionally, it's the same.

Whew, that's a lot to digest.

I see what you mean, regarding the possible differences with the probe's and calculations. My probe is designed to give fairly accurate readings with 50 ohm loads. Never pondered its accuracy with different loads. You bring up a good point.
The measurement at Q10 gate is across the 100 ohm resistor, which is why I believe the V*V/100 formula was used.

The diode probe used here is N5ESE's ballpoint rf probe design.
http://www.io.com/~n5fc/rfprobe2.htm
It uses a 1N34A glass diode, 0.01uF cap and 4.3Mohm resistor, to match my Fluke 8020A DVM 10Mohm input impedance.

Let me know if you discover anything further.

Regards,
Mike

--- In mmr40owngrp@yahoogroups.com, "James Shrum" <jshroomy@...> wrote:

>
> Mike,
> You and I built the MMR via the same source. Its interesting that
we
> have the exact same problem. I've not compared the entire
schematic to
> PCB junction by junction. Have you done this by chance?
> Also, out of curiosity, how are you measuring your gate voltage and
> final RF output?
> My readings were very comparable to yours. Same gate, same final
> output when measured with a diode probe.
> When tested with the KD1JV swr/power meter it showed me about 5-6
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> investigate further, but I believe I was using the V*V/100 for one
> probe, and the design was intended for V*V/50 ... but I'm not sure.
>

604. Low RF drive resolved

Yahoo group: mmr40owngrp
Date: 2008-12-06 02:43:48 UTC
From: miketa_us
Topic: 604 Message: 604

Thank you to Ray & Jim for responding to my queries, their responses helped me to resolve my issue.

Because I was not measuring 7-8V at the Q10 gate I thought my drive was too low resulting in only 2w output at the antenna.

Taking a closer look at the power at the low pass filter input(18-19V) and its greatly attenuated output(10V) lead me to believe there was a definite problem with my low pass filter. Though L3 & L4 had the correct number of turns, spreading & compressing the turns didn't help.

I replaced all of the capacitors and rewound the toroids in the filter network and now get 17.7V(6.3W) into a 50 ohm load.

I'm thinking that the 7-8V measurement in the manual is either a peak-peak reading or the drive signal harmonics is playing havoc with my rf probe.

Anyway, all is well. A big thank you to KD1JV for designing the MMR-40 and making available its documents to the homebrewing community.

73,
Mike n2eab

605. Re: So where to begin?

Yahoo group: mmr40owngrp
Date: 2008-12-22 02:10:16 UTC
From: nu8ll
Topic: 402 Message: 605

I have the same problem, but maybe a little worse.
my fuse didn't blow... the trace under the heat sink did.
After this, I questioned a short between the heat sink and Q10.
It showed a short. So I loosened the nylon screw and slide an
insulator between the two, metered again. Still a short from Q10's
tab and ground. (Shorted bidirectional)
Any thoughts of where to start looking, after I repair a trace.
Gratefully,

--- In mmr40owngrp@yahoogroups.com, Steven Weber <kd1jv@...> wrote:
>
>
> > Hi Guys I have
the same
> >problem. Everything was fine until I installed Q10 and heatsink.
I keep
> >blowing the 2 amp fuse I have in line on my power supply. Got
>
> Check for a short between the heatsink and tab of Q10. You might
need an
> insulator between them if the anodizing got nicked.
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> 72,
> Steve, KD1JV
> "Melt Solder"
> White Mountains of New Hampshire
> http://kd1jv.qrpradio.com
>

606. Re: [mmr40owngrp] Re: So where to begin?

Yahoo group: mmr40owngrp
Date: 2008-12-22 12:28:43 UTC
From: James Shrum
Topic: 402 Message: 606

Hi.
Are you by chance using a mica sheet? I know you normally don't
require one, but I ended up using one, and it cut out my short.

Good Luck.

On Sun, Dec 21, 2008 at 8:10 PM, nu8ll <nu8ll@...> wrote:
> I have the same problem, but maybe a little worse.
> my fuse didn't blow... the trace under the heat sink did.
> After this, I questioned a short between the heat sink and Q10.
> It showed a short. So I loosened the nylon screw and slide an
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>

607. Re: So where to begin?

Yahoo group: mmr40owngrp
Date: 2008-12-23 02:08:52 UTC
From: nu8ll
Topic: 402 Message: 607

I had not used a mica sheet, however, I will be implementing one.
I do have a plastic shim between the heatsink and Q10 for testing
purposes. I still have a short from Q10's tab to ground. Definately
not thru the heat sink.
I hope I have not fried Q10.

--- In mmr40owngrp@yahoogroups.com, "James Shrum" <jshroomy@...>
wrote:
>
> Hi.
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> require one, but I ended up using one, and it cut out my short.
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> >
> >
>

608. Catching Up with Email

Yahoo group: mmr40owngrp
Date: 2008-12-27 01:57:33 UTC
From: Steven Read
Topic: 608 Message: 608

Could I get someone to send me (off list) a copy of mail for this group?
I am trying to get a better understanding of this and other QRP kits. At
this point I am subscribed to several QRP kit echoes. Most of the others
have had quite a bit of traffic lately but this one has been rather quiet.

I have Thunderbird and can import mbox and eml formats. There is a
possibility I can import other formats but am not sure.

Steven Read - ab9ol

609. MMR 40 boards

Yahoo group: mmr40owngrp
Date: 2009-01-04 02:37:33 UTC
From: wormburner007
Topic: 609 Message: 609

Is anyone suppling just a pc board for the mmr40? I know that there is a kit avilable but I have a lot of the parts so would like to use them in place of buying a kit.
73 Phil

610. cw mode switching

Yahoo group: mmr40owngrp
Date: 2009-01-10 03:38:24 UTC
From: wb7dmx
Topic: 610 Message: 610

I have a mmr40 in the older black plastic case that works fine.

now I am building another one with the newer red case and the digital dial, its all finished except that I am confused as to how to wire the mic and key jacks to the pc board.
what I have now is the ground wire to both jacks and one wire to the mic jack, and another wire to the key jack as if it were one jack mounted to the board, as it is shown in the picture in the case assembly manual.
the problem is I don't see how it can work this way, and it don't.

the key jack still must have some way to tell the rig to switch to cw mode when a mono plug is connected to it and still be able to key the cw tone.

I am really confused on how to do this with two seperate jacks.

bob
WB7DMX

611. Re: cw mode switching

Yahoo group: mmr40owngrp
Date: 2009-01-10 09:36:16 UTC
From: stealth49.geo
Topic: 610 Message: 611

--- In mmr40owngrp@yahoogroups.com, "wb7dmx" <wb7dmx@...> wrote:
>
> I have a mmr40 in the older black plastic case that works fine.
>
> now I am building another one with the newer red case and the digital
> dial, its all finished except that I am confused as to how to wire t

Similar problem, tried many things, but have now lost side tone and
any hint of transmit. Any suggestions on where to look would be welcomed.

Before switch to new case radio work just fine.

Tim
W1WCI

613. Re: [mmr40owngrp] Re: cw mode switching

Yahoo group: mmr40owngrp
Date: 2009-01-10 22:11:09 UTC
From: bob bailey
Topic: 610 Message: 613

I got a reply today on how to wire the two jacks.
they are wired in parallel so that either jack will work, as if they were wired directly to the pc board but not at the same time

bob
WB7DMX

From: stealth49.geo
Sent: Saturday, January 10, 2009 5:40 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: cw mode switching

--- In mmr40owngrp@yahoogroups.com, "wb7dmx" <wb7dmx@...> wrote:
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Similar problem, tried many things, but have now lost side tone and
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Tim
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614. mic and key jacks update

Yahoo group: mmr40owngrp
Date: 2009-01-11 04:35:44 UTC
From: wb7dmx
Topic: 614 Message: 614

it now apears that the manual and discription for the new hendricks
case with digital dial is in error.

you cannot wire the mic and key jacks as discribed in the manual.
the mic jack must be wired as if it was still on the pc board, the
second jack that is labled as the key jack cannot be used as discribed,
it must be used as it is discribed in the older manual that has just
one jack.

after solving this key CW tone problem, I have decided to use the
second hole that was for the key jack as a headphone jack.
doing this will allow me to use a computer headset with boom mic with
this rig and just unplug the mic and plug in the key when I want to
operate CW, which is the way I have my other older MMR40 set up.

this info should have been updated in the manual and the web sight here
so others would not fall into this same problem.

bob
WB7DMX

615. Introduction and homemade PCB

Yahoo group: mmr40owngrp
Date: 2009-01-14 01:50:12 UTC
From: veenstra_f
Topic: 615 Message: 615

Hi All,

I joined this group today and would like to introduce myself. I'm Floyd PD8F from the Netherlands, Europe and I am interested in homebrew projects. About 25 years ago I passed my novice exam, I intended to go for the full license right after but due to circumstances I had no time for this hobby anymore. A few months ago I went to a Ham fair nearby and got all excited again, I renewed my license and bought a secondhand FT817. This is a 5 Watt QRP set but I managed to make DX contacts all over the world with it during peaks in propagation. With only a simple 20 meter longwire from my balcony to the nearest lamppost.
And I realized how much fun this hobby is and I'm glad to be back: for I was a stray sheep but have returned to the herd.

Just one thing was still missing: the feeling of a copper clad board in my hands, the staring at schematics that never seem to make sense, the smell of hot solder and the inevitable burn blisters. (I'm actually not that handy) So I started building a BitX20 the `dead bug' way using the help of local Hams and members of the BitX20 Yahoo group. It is basically finished now but not correctly aligned yet. Time to look around for a new project and I got interested in both the MMR-40 and the TAK-40 winners of the ARRL competition but decided on the MMR-40 first.

I already ordered most parts and they are on the way to my mailbox. I already have a copper board and intend to etch the PCB myself. If any of you have any experience with that please let me know if you can give me some hints.

On Steven KD1JV's website I found a good description and also a basic PCB layout in the PDF file. I assume this is the view from the component side because it includes the silk screen side in positive image, so I flipped it round the Y axis to mirror image it and I intend to copy it by hand on a single sided 10 by 15 cm board (4" x 6") using permanent markers. Then etch it and by that time the components should have arrived so I can put them on.

Maybe some of you can give me some pointer and I might even share some of my experiences to the benefit of others.

73, Floyd PD8F

616. homemade PCB

Yahoo group: mmr40owngrp
Date: 2009-01-14 16:38:47 UTC
From: Bill Noyce
Topic: 616 Message: 616

Welcome, Floyd!

> Time to look around for a new project and I got interested in both
> the MMR-40 and the TAK-40 winners of the ARRL competition but decided
> on the MMR-40 first.

Great choice!

The easiest way to etch a PC board for a project like this is to use a laser printer and the "toner transfer method." You can find a lot of descriptions on the Web; here's one:
http://www.headwize.com/projects/garbz2_prj.php

For this process you'll want to print the pattern as seen from the component side (just as it appears on Steve's web site) because it reverses when you iron the toner onto the copper.

-- Bill, AB1AV

617. Re: homemade PCB

Yahoo group: mmr40owngrp
Date: 2009-01-14 21:26:56 UTC
From: veenstra_f
Topic: 616 Message: 617

Thanks Bill,

I don't own a laser printer, only a simple HP deskjet and I don't think that will work. So I will have to do it the old fashioned way and today I went to a local shop (Dutch equivalent of Tandy/RadioShack) to get some sheets of those handy rub-on component symbols. But they don't sell them anymore, I was told everybody uses the photographic method nowadays. I searched the internet but they don't seem to be manufactured anymore.
What happened to the good old days? (does this mean I'm really getting old?)

So I decided to draw everything with permanent markers in mirror image on the copper. That is very time consuming and I'm only half way there. Especially where the IC's are there is very little margin for error, even with the finest marker of 0.3 mm. But I'll finish it, etch it and see how it works out.
For those of you who use the metric system like me, the board should be about 10.2 by 12.1 centimeters in size. But 10 x 12 should be just fine.

Thanks for the link Bill! I knew about the method with transparent sheet, UV lamp and photosensitive copper plate but not this one using photo gloss paper and an iron. If things don't work out that well I could ask a friend with a laser printer and I have an iron myself.
After all, that's what the Ham spirit is all about: experimenting . and ironing.

I'll let you know how things turned out.

73, Floyd PD8F

--- In mmr40owngrp@yahoogroups.com, Bill Noyce <WBNoyce@...> wrote:
>
> Welcome, Floyd!
>
> > Time to look around for a new project and I got interested in both
> > the MMR-40 and the TAK-40 winners of the ARRL competition but decided
> > on the MMR-40 first.
>
> Great choice!
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> The easiest way to etch a PC board for a project like this is to use a
> laser printer and the "toner transfer method." You can find a lot

of
> descriptions on the Web; here's one:
> http://www.headwize.com/projects/garbz2_prj.php
>
> For this process you'll want to print the pattern as seen from the
> component side (just as it appears on Steve's web site) because it
> reverses when you iron the toner onto the copper.
>
> -- Bill, AB1AV
>

618. AWG wire to metric

Yahoo group: mmr40owngrp
Date: 2009-01-16 03:02:02 UTC
From: veenstra_f
Topic: 618 Message: 618

Over here I can get the wire for the coil and toroid only in tenths millimeters. Now #32 equals 0.202 so that is close enough.
But #28 is 0.321 and I have some 0.3 mm wire left from my previous project. This size is somehere between #28 and #29.

Take a look here for AWG to metric:
www.technick.net/public/code/cp_dpage.php?aiocp_dp=guide_awg_to_metric

So if I use this wire with a slightly higher diameter, should I add a few more turns on the PTO, or do just the opposite: a few turns less? My instinct tels me it should be one or two turns less but maybe I'm wrong and it works the other way round.

Any ideas? Maybe someone is even clever enough to calculate how many turns less or more it should be. I don't know which formula to use but I think the cross sectional area is crusial here, not the diameter.

Any ideas?

Floyd PD8F

619. PTO Frequency too High

Yahoo group: mmr40owngrp
Date: 2009-01-16 03:30:37 UTC
From: ecoons
Topic: 619 Message: 619

I have just completed assembly of the MMR40 full kit and measuring the PTO oscillator frequency I get a reading of 3.3 Mhz after moving the turns on L2 as close together as I can get them. Do I need a few more turns on L1 to lower the frequency? The coil form for L1 supplied with the kit I can only fit about 32 turns between the holes that are drilled in it. I am thinking of trying to drill another hole in the form and adding a few turns. Has anyone had this same problem?
Thanks,
Eric
W2EJC

620. Re: [mmr40owngrp] PTO Frequency too High

Yahoo group: mmr40owngrp
Date: 2009-01-16 03:59:31 UTC
From: bob bailey
Topic: 619 Message: 620

if the frequency is too high, you may have the main and feed-back windings reversed on L2, as per the instructions on page 11 top.
bob
WB7DMX

From: ecoons
Sent: Thursday, January 15, 2009 10:30 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] PTO Frequency too High

I have just completed assembly of the MMR40 full kit and measuring the PTO oscillator frequency I get a reading of 3.3 Mhz after moving the turns on L2 as close together as I can get them. Do I need a few more turns on L1 to lower the frequency? The coil form for L1 supplied with the kit I can only fit about 32 turns between the holes that are drilled in it. I am thinking of trying to drill another hole in the form and adding a few turns. Has anyone had this same problem?
Thanks,
Eric
W2EJC

621. Re: PTO Frequency too High

Yahoo group: mmr40owngrp
Date: 2009-01-16 04:04:30 UTC
From: ecoons
Topic: 619 Message: 621

Check that and they are fine. The frequency isn't that far off in my opinion but thanks for the suggestion. I still think it's because I have too few turns on L1.

Eric

W2EJC

--- In mmr40owngrp@yahoogroups.com, "bob bailey" <wb7dmx@...> wrote:
>
> if the frequency is too high, you may have the main and feed-back windings reversed on L2, as per the instructions on page 11 top.
> bob
> WB7DMX
>
>
> From: ecoons
> Sent: Thursday, January 15, 2009 10:30 PM
> To: mmr40owngrp@yahoogroups.com
> Subject: [mmr40owngrp] PTO Frequency too High
>
>
> I have just completed assembly of the MMR40 full kit and measuring the
> PTO oscillator frequency I get a reading of 3.3 Mhz after moving the
> turns on L2 as close together as I can get them. Do I need a few more
> turns on L1 to lower the frequency? The coil form for L1 supplied
> with the kit I can only fit about 32 turns between the holes that are
> drilled in it. I am thinking of trying to drill another hole in the
> form and adding a few turns. Has anyone had this same problem?
> Thanks,
> Eric
> W2EJC
>

622. Re: PTO Frequency too High

Yahoo group: mmr40owngrp
Date: 2009-01-16 14:12:16 UTC
From: wb0smx
Topic: 619 Message: 622

I have read of several instances of this problem. Sometimes it is because the builder used the thicker #30 wire that was supplied with the kit, rather than the thinner #32 wire, which was also supplied. With the thicker wire, you can't fit the 40 turns onto the form. With less turns, you get less inductance, and too high of a frequency.
73 de Randy WB0SMX

> I still think it's because I
> have too few turns on L1.

623. Re: PTO Frequency too High

Yahoo group: mmr40owngrp
Date: 2009-01-16 15:55:37 UTC
From: ecoons
Topic: 619 Message: 623

--- In mmr40owngrp@yahoogroups.com, "wb0smx" <rdpecken1@...> wrote:
>
> I have read of several instances of this problem. Sometimes it is
> because the builder used the thicker #30 wire that was supplied with
> the kit, rather than the thinner #32 wire, which was also supplied.
> With the thicker wire, you can't fit the 40 turns onto the form.
With
> less turns, you get less inductance, and too high of a frequency.
> 73 de Randy WB0SMX
>
> > I still think it's because I
> > have too few turns on L1.
>
I did use the smaller of the 2 wires provided but I could still only
get about 32 turns on the coil form between the holes. The wires were
all touching each oher using my finger nail to compact them together.
This morning I added 8 turns to the coil by leaving a space where the
hole is, winding them past it and then going back thru the hole to
secure the turns. This only brough the frequency down about 100Kc so
I still have a PTO freq at 3.23 Mhz. I have check the connections and
turns on L2 and they are correct. Any other ideas?
Thanks,
Eric
W2EJC

624. Re: AWG wire to metric

Yahoo group: mmr40owngrp
Date: 2009-01-16 17:52:37 UTC
From: wa5pse
Topic: 618 Message: 624

I wouldn't change the number of turns unless there is a significant shift in operating frequency.

When I built my PTO with the wire that was supplied with the kit, I had to remove turns from the PTO coil to make it operate where it was supposed to.

I also built a 2N2_20 where I used wire that was usually slightly thicker and never had a problem with the winding count.

With a thicker conductor, I'd think you'd end up with slightly less inductance...but, not enough change where adding turns wouldn't overshoot the correction you would need.

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
>
> Over here I can get the wire for the coil and toroid only in tenths
> millimeters. Now #32 equals 0.202 so that is close enough.
> But #28 is 0.321 and I have some 0.3 mm wire left from my previous
> project. This size is somehere between #28 and #29.
>
> Take a look here for AWG to metric:
> www.technick.net/public/code/cp_dpage.php?aiocp_dp=guide_awg_to_metric
>
> So if I use this wire with a slightly higher diameter, should I add a
> few more turns on the PTO, or do just the opposite: a few turns less?
> My instinct tels me it should be one or two turns less but maybe I'm
> wrong and it works the other way round.
>
> Any ideas? Maybe someone is even clever enough to calculate how many
> turns less or more it should be. I don't know which formula to use but
> I think the cross sectional area is crusial here, not the diameter.
>
> Any ideas?
>
> Floyd PD8F
>

625. Re: AWG wire to metric

Yahoo group: mmr40owngrp
Date: 2009-01-16 20:08:09 UTC
From: veenstra_f
Topic: 618 Message: 625

I guess you're right Mike, it probably won't make that much a
difference. I'll just use the amount of turns required. The inductance
will undoubtedly be a little higher. So it may operate on a slightly
lower frequency but I can always correct a lot with L2.

Shame those measurements are so different between Europe and the US. I
tried to get a screw to fit the spacer (ordered from Mouser) but both
the thickness and threads are completely different. So I had to drill
it out a little and rethread it, but it fits nicely now.

The only thing other than steel used for screws is called `messing' in
this country. I know it is a copper based alloy and I assume (hope :-)
is the same as what you call brass.

We'll see. Thanks!

73, Floyd PD8F

--- In mmr40owngrp@yahoogroups.com, "wa5pse" <k9qb@...> wrote:
>
> I wouldn't change the number of turns unless there is a significant
> shift in operating frequency.
>
> When I built my PTO with the wire that was supplied with the kit, I
> had to remove turns from the PTO coil to make it operate where it was
> supposed to.
>
> I also built a 2N2_20 where I used wire that was usually slightly
> thicker and never had a problem with the winding count.
>
> With a thicker conductor, I'd think you'd end up with slightly less
> inductance...but, not enough change where adding turns wouldn't
> overshoot the correction you would need.
>
> Mike, WA5PSE

626. Re: AWG wire to metric

Yahoo group: mmr40owngrp
Date: 2009-01-16 22:08:14 UTC
From: wa5pse
Topic: 618 Message: 626

I think you're on the right track Floyd.

By doing your own threading, you may end up with a better working PTO coil.
My PTO screw loosened up a lot over a short time...I have improved on the looseness by applying some teflon pipe thread tape to the threads and it sure made a big difference.

"Messing"...someone can correct me if I'm wrong, but, I've seen literature written in German where brass is referred to as messing.

So you should be good.

I really enjoy my MMR40, but, still have an issue when trying to use it on sideband...
Have really had fun with it on cw tho'.

73,72, and GL...Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
>
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> difference. I'll just use the amount of turns required. The inductance
> will undoubtedly be a little higher. So it may operate on a slightly
> lower frequency but I can always correct a lot with L2.
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> Shame those measurements are so different between Europe and the US. I
> tried to get a screw to fit the spacer (ordered from Mouser) but both
> the thickness and threads are completely different. So I had to drill
> it out a little and rethread it, but it fits nicely now.
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> The only thing other than steel used for screws is called `messing' in
> this country. I know it is a copper based alloy and I assume (hope :-)
> is the same as what you call brass.
>
> We'll see. Thanks!
>
> 73, Floyd PD8F
>
>
> --- In mmr40owngrp@yahoogroups.com, "wa5pse" <k9qb@> wrote:
> >
> > I wouldn't change the number of turns unless there is a significant
> > shift in operating frequency.
> >
> > When I built my PTO with the wire that was supplied with the kit, I

> > had to remove turns from the PTO coil to make it operate where it was
> > supposed to.
> >
> > I also built a 2N2_20 where I used wire that was usually slightly
> > thicker and never had a problem with the winding count.
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> > With a thicker conductor, I'd think you'd end up with slightly less
> > inductance...but, not enough change where adding turns wouldn't
> > overshoot the correction you would need.
> >
> > Mike, WA5PSE
>

627. Re: PTO Frequency too High

Yahoo group: mmr40owngrp
Date: 2009-01-17 01:22:56 UTC
From: wb0smx
Topic: 619 Message: 627

Eric, please see message # 296 at
http://groups.yahoo.com/group/mmr40owngrp/message/296

I think you may have had 2 problems initially.

First, you may have received the wrong size wire or in incorrectly drilled spacer, but there needs to be something close to 39 windings on L1, regardless of wire size. It sounds like you have fixed that, at this point.

The second possible problem is described in message # 296 by Steve Weber. It has to do with exactly how you wind the L2 toroid. If you wind your toroid clockwise when looking at it, the ends will not fall in the correct place when you go to mount the torroid on the board, and they end up getting cross connected. This usually results in the frequency being about 500KC too high - pretty close to what you are seeing. You should wind the coil exactly like the instructions on page 11 of the manual (Revised 7-11-07), poking the short end through from the side facing you, then wrapping the long end counter-clockwise around the core. The feedback winding will end up wrapped the same way, because of the way you make the tap and then cut it. Then when looking at the bottom of the finished coil, you will see the Feedback lead furthest from your body and the main lead closer on the left side, and then the other end of the main lead furthest from your body and the feedback lead closer on the right side.

When you mount the L2 coil, the leads go straight down into the holes in the board, no crossing is necessary. Look down on the component side of the board, with the PTO assembly in the upper right. There are 4 holes for the L2 windings. The holes marked "F" (top right and bottom left) are for the 5 turn feedback winding. The other two holes are for the 28 turn main winding.

Sorry this was lengthy and maybe a little too detailed, but from reading early messages, I know many have had this problem as well. Good luck and 73 - Randy WB0SMX

--- In mmr40owngrp@yahoogroups.com, "ecoons" <ecoons@...> wrote:
>
> > > I still think it's because I
> > > have too few turns on L1.
> >
> I did use the smaller of the 2 wires provided but I could still
only
> get about 32 turns on the coil form between the holes. The wires
were

> all touching each oher using my finger nail to compact them
together.
> This morning I added 8 turns to the coil by leaving a space where
the
> hole is, winding them past it and then going back thru the hole to
> secure the turns. This only brough the frequency down about 100Kc
so
> I still have a PTO freq at 3.23 Mhz. I have check the connections
and
> turns on L2 and they are correct. Any other ideas?

628. Re: AWG wire to metric

Yahoo group: mmr40owngrp
Date: 2009-01-17 10:53:06 UTC
From: veenstra_f
Topic: 618 Message: 628

Yes Mike, right after posting my previous message I searched the web and stumbled upon a German website with their product details in both English and German. And Messing was translated as Brass, so I'm fine there. Apparently the word is the same in German as it is in Dutch. Hmm messing . no matter where you live in this world, it should sound familiar to every home brewing Ham :-)

The screw is still a little too tight in the spacer and hard to turn but I like to keep it that way, I'm sure it will loosen over time as well.
But the screw is quite a bit thicker now (about 0.3 millimeter more in diameter, 0.015 inch), and I don't know what that will do. Well, increase the inductance I assume.
BTW: a correction to my previous message: thicker wire will increase the inductance but since there is limited space I will probably not be able to make the needed amount of turns. I haven't started winding yet. Hence the result will be a decrease again. But the thicker screw inside will increase the inductance again. Or do I have it the wrong way round again (still a novice)? At least I hope they all even each other out. Probably the frequency range will change aswell: either in- or decrease. I'm completely lost now.

Up until now I have only gathered the components and I have not actually started building yet. As you may know we Dutch are (in) famous for being real cheapskates so I am trying to build it as cheap as possible.
No seriously, I just like to do as much as I can myself. I made a PCB board myself drawing all the lines with a thin permanent marker on the copper. That was extremely time-consuming, it must have taken me 5-8 hours at least. Especially the middle part where the IC's should go it is very tricky drawing.
In case anybody wants to have a go at it, make sure the side of you hand doesn't touch the copper: grease on the copper will definitely mess up the etching process. Always keep a piece of paper between your hand and copper plate, or use disposable thin surgical gloves. I `borrowed' a couple from the local hospital a few years ago.
And you need a steady hand, no drinking the night before. ;-)

Yesterday I etched it and it turned out pretty good. I will place a photograph in the Photos section. Unfortunately ferric chloride (FeCl3) is no longer allowed to be sold in western Europe (environmental laws) but Ammonium Per Sulfate works as well, it only takes a bit longer.

Today I will have to check all the copper traces making sure they all connect and make sure there is no shortcut to ground anywhere.

Because I made it on a single sided board I will have to make some additional wiring, but that is not a real problem. The tricky part now is how to get the PTO firmly on the non-copper side of the board. Maybe I should cut out a small copper plate the size of the PTO, assemble it all and attach it to the PCB component side with 2 tiny bolts and nuts.

If you have a better idea Mike (or anybody else for that matter) for this problem please let me know.

Bye! Floyd PD8F

--- In mmr40owngrp@yahoogroups.com, "wa5pse" <k9qb@...> wrote:
>
> I think you're on the right track Floyd.
>
> By doing your own threading, you may end up with a better working
PTO
> coil.
> My PTO screw loosened up a lot over a short time...I have improved
on
> the looseness by applying some teflon pipe thread tape to the
threads
> and it sure made a big difference.
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> "Messing"...someone can correct me if I'm wrong, but, I've seen
> literature written in German where brass is referred to as messing.
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> So you should be good.
>
> I really enjoy my MMR40, but, still have an issue when trying to use
> it on sideband...
> Have really had fun with it on cw tho'.
>
> 73,72, and GL...Mike, WA5PSE

629. Re: homemade PCB

Yahoo group: mmr40owngrp
Date: 2009-01-17 13:11:27 UTC
From: veenstra_f
Topic: 616 Message: 629

PCB is finished Bill,

I did it with permanent markers.
Photo's in album Photos/PD8F

73, Floyd PD8F

630. Re: AWG wire to metric

Yahoo group: mmr40owngrp
Date: 2009-01-17 13:13:09 UTC
From: veenstra_f
Topic: 618 Message: 630

Photo's of the PCB in album Photos/PD8F

73, Floyd PD8F

631. Re: PTO Frequency too High

Yahoo group: mmr40owngrp
Date: 2009-01-17 14:08:36 UTC
From: ecoons
Topic: 619 Message: 631

I wound L2 exactly like the manual said with passing the wire down thru the core and winding counter clockwise. None of the leads on the coil need to be crossed to get it mounted so I am assuming that it is wound and mounted correctly. I added about 60pf of capacitance in parallel with C8 and now the frequency is where it is supposed to be. I need to remove the 3 caps I have tack soldered under the board, the cap supplied with the kit, measure them all and find a value close so I can mount the board in the case. I did connect an antenna and peaked the receiver and it sounds great! After the capacitor issue, it's on to aligning the transmitter.
Thanks!
Eric, W2EJC
--- In mmr40owngrp@yahoogroups.com, "wb0smx" <rdpecken1@...> wrote:
>
> Eric, please see message # 296 at
> http://groups.yahoo.com/group/mmr40owngrp/message/296
>
> I think you may have had 2 problems initially.
>
> First, you may have received the wrong size wire or in incorrectly
> drilled spacer, but there needs to be something close to 39
windings
> on L1, regardless of wire size. It sounds like you have fixed
that,
> at this point.
>
> The second possible problem is described in message # 296 by Steve
> Weber. It has to do with exactly how you wind the L2 toroid. If
you
> wind your toroid clockwise when looking at it, the ends will not
fall
> in the correct place when you go to mount the torroid on the board,
> and they end up getting cross connected. This usually results in
the
> frequency being about 500KC too high - pretty close to what you are
> seeing. You should wind the coil exactly like the instructions on
> page 11 of the manual (Revised 7-11-07), poking the short end
through
> from the side facing you, then wrapping the long end counter-
> clockwise around the core. The feedback winding will end up
wrapped
> the same way, because of the way you make the tap and then cut it.
> Then when looking at the bottom of the finished coil, you will see
> the Feedback lead furthest from your body and the main lead closer
on

> the left side, and then the other end of the main lead furthest
from
> your body and the feedback lead closer on the right side.
>
> When you mount the L2 coil, the leads go straight down into the
holes
> in the board, no crossing is necessary. Look down on the component
> side of the board, with the PTO assembly in the upper right. There
> are 4 holes for the L2 windings. The holes marked "F" (top right
and
> bottom left) are for the 5 turn feedback winding. The other two
holes
> are for the 28 turn main winding.
>
> Sorry this was lengthy and maybe a little too detailed, but from
> reading early messages, I know many have had this problem as well.
> Good luck and 73 - Randy WB0SMX
>
> --- In mmr40owngrp@yahoogroups.com, "ecoons" <ecoons@> wrote:
> >
> > > > I still think it's because I
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> > I did use the smaller of the 2 wires provided but I could still
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> > This morning I added 8 turns to the coil by leaving a space where
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> > hole is, winding them past it and then going back thru the hole
to
> > secure the turns. This only brough the frequency down about
100Kc
> so
> > I still have a PTO freq at 3.23 Mhz. I have check the connections
> and
> > turns on L2 and they are correct. Any other ideas?
>

632. Re: AWG wire to metric

Yahoo group: mmr40owngrp
Date: 2009-01-17 14:27:13 UTC
From: wa5pse
Topic: 618 Message: 632

Hello Floyd,

Nice etching job.

Since you seem to have a good handle on etching, I'd suggest etching a small board for mounting on the top side of your mainboard and attaching with super glue or epoxy.

That way you'll have the solder pads for mounting the "messing" nuts that the PTO screw run in.

I gotta respect your scratch build approach!

I've etched boards before..I did a discreet PLL board for a synthesizer to use with my old Kenwood 7400 2m xtal rig back in the early 80's.

These days, I've been playing around with "Manhattan" style.

Keep in touch, sounds like a fun challenge...

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
>
> Yes Mike, right after posting my previous message I searched the web
> and stumbled upon a German website with their product details in both
> English and German. And Messing was translated as Brass, so I'm fine
> there. Apparently the word is the same in German as it is in Dutch.
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> The screw is still a little too tight in the spacer and hard to turn
> but I like to keep it that way, I'm sure it will loosen over time as
> well.
> But the screw is quite a bit thicker now (about 0.3 millimeter more
> in diameter, 0.015 inch), and I don't know what that will do. Well,
> increase the inductance I assume.

> BTW: a correction to my previous message: thicker wire will
increase
> the inductance but since there is limited space I will probably
not
> be able to make the needed amount of turns. I haven't started
winding
> yet. Hence the result will be a decrease again. But the thicker
screw
> inside will increase the inductance again. Or do I have it the
wrong
> way round again (still a novice)? At least I hope they all even
each
> other out. Probably the frequency range will change aswell: either
in-
> or decrease. I'm completely lost now.
>
> Up until now I have only gathered the components and I have not
> actually started building yet. As you may know we Dutch are (in)
> famous for being real cheapskates so I am trying to build it as
cheap
> as possible.
> No seriously, I just like to do as much as I can myself. I made a
PCB
> board myself drawing all the lines with a thin permanent marker on
> the copper. That was extremely time-consuming, it must have taken
me
> 5-8 hours at least. Especially the middle part where the IC's
should
> go it is very tricky drawing.
> In case anybody wants to have a go at it, make sure the side of
you
> hand doesn't touch the copper: grease on the copper will
definitely
> mess up the etching process. Always keep a piece of paper between
> your hand and copper plate, or use disposable thin surgical
gloves.
> I `borrowed' a couple from the local hospital a few years ago.
> And you need a steady hand, no drinking the night before. ;-)
>
> Yesterday I etched it and it turned out pretty good. I will place
a
> photograph in the Photos section. Unfortunately ferric chloride
> (FeCl3) is no longer allowed to be sold in western Europe
> (environmental laws) but Ammonium Per Sulfate works as well, it
only
> takes a bit longer.
>
> Today I will have to check all the copper traces making sure they
all

> connect and make sure there is no shortcut to ground anywhere.
> Because I made it on a single sided board I will have to make some
> additional wiring, but that is not a real problem. The tricky part
> now is how to get the PTO firmly on the non-copper side of the
board.
> Maybe I should cut out a small copper plate the size of the PTO,
> assemble it all and attach it to the PCB component side with 2
tiny
> bolts and nuts.
>
> If you have a better idea Mike (or anybody else for that matter)
for
> this problem please let me know.
>
> Bye! Floyd PD8F
>
>
> --- In mmr40owngrp@yahoogroups.com, "wa5pse" <k9qb@> wrote:
> >
> > I think you're on the right track Floyd.
> >
> > By doing your own threading, you may end up with a better
working
> PTO
> > coil.
> > My PTO screw loosened up a lot over a short time...I have
improved
> on
> > the looseness by applying some teflon pipe thread tape to the
> threads
> > and it sure made a big difference.
> >
> > "Messing"...someone can correct me if I'm wrong, but, I've seen
> > literature written in German where brass is referred to as
messing.
> >
> > So you should be good.
> >
> > I really enjoy my MMR40, but, still have an issue when trying to
use
> > it on sideband...
> > Have really had fun with it on cw tho'.
> >
> > 73,72, and GL...Mike, WA5PSE
>

633. Re: PTO Frequency too High

Yahoo group: mmr40owngrp
Date: 2009-01-17 15:52:13 UTC
From: wb0smx
Topic: 619 Message: 633

Good to hear you have made progress. Hopefully you will find a
capacitor that is the wrong value, which could explain this...
Please let us know if and when you find the real culprit.

I'm having a blast with mine. It's all built and operating, but not in
the case yet, as I'm examining each stage and comparing what I "think"
is happening with what I am measuring. Hand computations, LtSpice
simulations and real world measurements are all compared to each
other. It's a good learning experience.
73 de Randy WB0SMX

--- In mmr40owngrp@yahoogroups.com, "ecoons" <ecoons@...> wrote:
>
>I added about 60pf of capacitance
> in parallel with C8 and now the frequency is where it is supposed to
> be. I need to remove the 3 caps I have tack soldered under the board,
> the cap supplied with the kit, measure them all and find a value
> close so I can mount the board in the case. I did connect an antenna
> and peaked the receiver and it sounds great!

634. Re: PTO Frequency too High

Yahoo group: mmr40owngrp
Date: 2009-01-17 18:11:29 UTC
From: ecoons
Topic: 619 Message: 634

I broke C8 removing it so I couldn't measure it but scrounged a 370pf
and a 27pf from the junk box and that put the freq at 2.991 Mhz. So
it seems the cap that came with the kit was of the correct value
(330pf) but for some reason not apparent to me, my particular setup
requires more capacitance. I am just going to go with it and see if
I can't get the transmitter working. Thanks for your help and ideas
everyone.
Eric W2EJC
--- In mmr40owngrp@yahoogroups.com, "wb0smx" <rdpecken1@...> wrote:
>
> Good to hear you have made progress. Hopefully you will find a
> capacitor that is the wrong value, which could explain this...
> Please let us know if and when you find the real culprit.
>
> I'm having a blast with mine. It's all built and operating, but
not in
> the case yet, as I'm examining each stage and comparing what
I "think"
> is happening with what I am measuring. Hand computations, LtSpice
> simulations and real world measurements are all compared to each
> other. It's a good learning experience.
> 73 de Randy WB0SMX
>
> --- In mmr40owngrp@yahoogroups.com, "ecoons" <ecoons@> wrote:
> >
> >I added about 60pf of capacitance
> > in parallel with C8 and now the frequency is where it is supposed
to
> > be. I need to remove the 3 caps I have tack soldered under the
board,
> > the cap supplied with the kit, measure them all and find a value
> > close so I can mount the board in the case. I did connect an
antenna
> > and peaked the receiver and it sounds great!
>

635. Re: AWG wire to metric

Yahoo group: mmr40owngrp
Date: 2009-01-18 13:37:13 UTC
From: veenstra_f
Topic: 618 Message: 635

I think that would be best. Just now I tried attaching it by drilling holes in the board, some wire over the nuts and solder them to the copper side. But everything is too wobbly now, this won't last long. Wasted a lot of nuts experimenting but luckily I bought some extra nuts and screws. A lot of `messing' around here. And it sure is fun experimenting.
I'll do it on a separate piece like you suggested, and then glue it to the board. I assume it is essential there is no copper left beneath the coil.

Back in the late 70's, early 80's I was still in school with little pocket money so I had to be resourceful. We lived on a farm and my dad had this cabinet with toxins and all kinds of chemical stuff. I have etched with hydrochloride, nitric acid and all kinds of stuff I don't know the English word for, even those chemical fertilizer grains diluted in water. And it turned out most acids can be used for etching but some quickly but some will take literally days (even weeks) to finish. I later heard fertilizer contains a certain amount of potassium and that may have done the trick. And the farm never caught fire and nothing ever exploded :-)

BTW: I heard in another Yahoo group there is new ARRL contest in latest QST. A linear amp this time. Sounds very interesting because I have a FT817 with standard output of 5W only. Shame I can't get QST over here, they have the best home brewing projects.

I'll make a small board with pads and let you know how it turned out.

Thanks Mike!

Bye, Floyd PD8F

--- In mmr40owngrp@yahoogroups.com, "wa5pse" <k9qb@...> wrote:
>
> Hello Floyd,
>
> Nice etching job.
>
> Since you seem to have a good handle on etching, I'd suggest
etching
> a small board for mounting on the top side of your mainboard and
> attaching with super glue or epoxy.
>
> That way you'll have the solder pads for mounting the "messing"
nuts
> that the PTO screw run in.

>
> I gotta respect your scratch build approach!
>
> I've etched boards before..I did a discreet PLL board for a
> synthesizer to use with my old Kenwood 7400 2m xtal rig back in the
> early 80's.
>
> These days, I've been playing around with "Manhattan" style.
>
> Keep in touch, sounds like a fun challenge...
>
> Mike, WA5PSE

636. Re: AWG wire to metric

Yahoo group: mmr40owngrp
Date: 2009-01-19 00:02:58 UTC
From: wa5pse
Topic: 618 Message: 636

Actually, on the kitted mmr40, the ground plane continues unbroken, underneath the PTO coil...just that much you won't have to etch.

I've experimented with a couple of etchants and found that who's selling the stuff really seemed to make a difference in how quick the etching happened....Store bought ferric chloride is about all I can remember for sure.

I even built a plastic tank one time that held about a pint of solution... in the bottom, it had another smaller plastic box hooked up to an aquarium pump...that little box had about 12 tiny holes drilled in it...the bubbles seemed to keep the etching solution moving...I also placed a 60 watt light bulb under all that...Etching times were cut down dramatically!

Unfortunately, I threw that out long ago.

Now, I either kit build, "manhattan" build or buy a board from Fred at FAR circuits....

Fred has most of the projects published in QST over recent years as well as many other designs too...and is just a fantastic resource.

Mike

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
>
> I think that would be best. Just now I tried attaching it by drilling
> holes in the board, some wire over the nuts and solder them to the
> copper side. But everything is too wobbly now, this won't last long.
> Wasted a lot of nuts experimenting but luckily I bought some extra
> nuts and screws. A lot of `messing' around here. And it sure is fun
> experimenting.
> I'll do it on a separate piece like you suggested, and then glue it
> to the board. I assume it is essential there is no copper left
> beneath the coil.
>
> Back in the late 70's, early 80's I was still in school with little
> pocket money so I had to be resourceful. We lived on a farm and my
> dad had this cabinet with toxins and all kinds of chemical stuff. I
> have etched with hydrochloride, nitric acid and all kinds of stuff I
> don't know the English word for, even those chemical fertilizer
> grains diluted in water. And it turned out most acids can be used for
> etching but some quickly but some will take literally days (even
> weeks) to finish. I later heard fertilizer contains a certain amount
> of potassium and that may have done the trick. And the farm never
> caught fire and nothing ever exploded :-)

>
> BTW: I heard in another Yahoo group there is new ARRL contest in
> latest QST. A linear amp this time. Sounds very interesting because I
> have a FT817 with standard output of 5W only. Shame I can't get QST
> over here, they have the best home brewing projects.
>
> I'll make a small board with pads and let you know how it turned out.
>
> Thanks Mike!
>
> Bye, Floyd PD8F
>
> --- In mmr40owngrp@yahoogroups.com, "wa5pse" <k9qb@> wrote:
> >
> > Hello Floyd,
> >
> > Nice etching job.
> >
> > Since you seem to have a good handle on etching, I'd suggest
> etching
> > a small board for mounting on the top side of your mainboard and
> > attaching with super glue or epoxy.
> >
> > That way you'll have the solder pads for mounting the "messing"
> nuts
> > that the PTO screw run in.
> >
> > I gotta respect your scratch build approach!
> >
> > I've etched boards before..I did a discreet PLL board for a
> > synthesizer to use with my old Kenwood 7400 2m xtal rig back in the
> > early 80's.
> >
> > These days, I've been playing around with "Manhattan" style.
> >
> > Keep in touch, sounds like a fun challenge...
> >
> > Mike, WA5PSE
>

637. Digital Dial and the MMR40

Yahoo group: mmr40owngrp
Date: 2009-01-21 19:08:03 UTC
From: ecoons
Topic: 637 Message: 637

I have completed the dial kit and have it calibrated. It is presently in frequency counter mode which I used to check the PTO frequency in the MMR40 kit. The instruction manual for the digital dial says to connect it to the BFO ocsillator using a 4.7 uf cap to program the IF offset. This appears to be U6, pin 7 in the schematic. Is this correct?
Thanks,
Eric

638. What's R1/C9 for?

Yahoo group: mmr40owngrp
Date: 2009-01-23 01:14:09 UTC
From: wb0smx
Topic: 638 Message: 638

I'm trying to learn a little here...

On the cold end of the Hartley Oscillator tickler coil (5 turns), there is Resistor R1 and Capacitor C9 going to ground.

I'm guessing this is to change the bias on the gate of the oscillator transistor Q14, but that is just a guess.

ltspice says it works if I put the cold end of the coil directly to ground.

Can anyone tell me what the advantage of R1/C9 are?
Thanks, Randy WB0SMX

639. Re: What's R1/C9 for?

Yahoo group: mmr40owngrp
Date: 2009-01-23 01:16:27 UTC
From: wb0smx
Topic: 638 Message: 639

Oops, I meant to say the Source of Q9, not the gate...

--- In mmr40owngrp@yahoogroups.com, "wb0smx" <rdpecken1@...> wrote:
>
> I'm trying to learn a little here...
>
> On the cold end of the Hartley Oscillator tickler coil (5 turns),
there
> is Resistor R1 and Capacitor C9 going to ground.
>
> I'm guessing this is to change the bias on the gate of the oscillator
> transistor Q14, but that is just a guess.
>
> ltspice says it works if I put the cold end of the coil directly to
> ground.
>
> Can anyone tell me what the advantage of R1/C9 are?
> Thanks, Randy WB0SMX
>

640. Re: What's R1/C9 for?

Yahoo group: mmr40owngrp
Date: 2009-01-23 01:21:14 UTC
From: wb0smx
Topic: 638 Message: 640

Doh!... I think I see... It's the only thing limiting the current through the jfet, right? And the cap just bypasses the "source resistor" to decrease the negative feedback that would otherwise be developed?
I've been staring at this circuit for too long, while I was modeling it in ltspice!

--- In mmr40owngrp@yahoogroups.com, "wb0smx" <rdpecken1@...> wrote:
>
> Oops, I meant to say the Source of Q9, not the gate...
>
> --- In mmr40owngrp@yahoogroups.com, "wb0smx" <rdpecken1@> wrote:
> >
> > I'm trying to learn a little here...
> >
> > On the cold end of the Hartley Oscillator tickler coil (5 turns),
> there
> > is Resistor R1 and Capacitor C9 going to ground.
> >
> > I'm guessing this is to change the bias on the gate of the
oscillator
> > transistor Q14, but that is just a guess.
> >
> > ltspice says it works if I put the cold end of the coil directly
to
> > ground.
> >
> > Can anyone tell me what the advantage of R1/C9 are?
> > Thanks, Randy WB0SMX
> >
>

641. Problems Solved!

Yahoo group: mmr40owngrp
Date: 2009-01-23 01:55:29 UTC
From: ecoons
Topic: 637 Message: 641

Problem solved! Radio is up and running and seems to run like a
champ. Now I need a 40 meter dipole to test it on the air
transmitting. Receive works great and the frequency in the digital
dial matching exactly with my TS450 and I am getting about 6.5 watts
out on transmit into a dummy load. Thanks again for every ones help!
73's Eric, W2EJC
--- In mmr40owngrp@yahoogroups.com, "ecoons" <ecoons@...> wrote:
>
> I have completed the dial kit and have it calibrated. It is
presently
> in frequency counter mode which I used to check the PTO frequency in
> the MMR40 kit. The instruction manual for the digital dial says to
> connect it to the BFO ocsillator using a 4.7 uf cap to program the
IF
> offset. This appears to be U6, pin 7 in the schematic. Is this
> correct?
> Thanks,
> Eric
>

642. What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-04 04:23:46 UTC
From: veenstra_f
Topic: 642 Message: 642

R30 is at one end connected between Q4 and Q11 but the other end seems to be floating in mid air. It is not connected to anything. And it doesn't seem to serve any purpose.

I have a feeling that in the original schematic somewhere along the line R30 got replaced by R24 (also 1 MOhm) but somehow R30 was never completely removed out of the schematic.

What do y'all think, might that be the reason?

73, Floyd PD8F

643. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-04 21:56:42 UTC
From: wa5pse
Topic: 642 Message: 643

Floyd,

I haven't had a chance to look, but, the circuit land that you don't see, may run back under the resistor and then on to wherever it goes...

You might take a closer look...

I'll check mine when I get back home...Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
>
> R30 is at one end connected between Q4 and Q11 but the other end seems
> to be floating in mid air. It is not connected to anything. And it
> doesn't seem to serve any purpose.
>
> I have a feeling that in the original schematic somewhere along the
> line R30 got replaced by R24 (also 1 MOhm) but somehow R30 was never
> completely removed out of the schematic.
>
> What do y'all think, might that be the reason?
>
> 73, Floyd PD8F
>

644. Re: [mmr40owngrp] Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-04 22:49:30 UTC
From: bob bailey
Topic: 642 Message: 644

look at the op amp U3, follow pin 3 to the center of VR5, which has one side grounded and the other side to R30, which then connects to C65, which then connects to Q13, I believe that this is for the side tone circuit.

bob
WB7DMX

From: wa5pse
Sent: Wednesday, February 04, 2009 4:56 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: What is R30 for ?

Floyd,

I haven't had a chance to look, but, the circuit land that you don't
see, may run back under the resistor and then on to wherever it goes...

You might take a closer look...

I'll check mine when I get back home...Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
>
> R30 is at one end connected between Q4 and Q11 but the other end
seems
> to be floating in mid air. It is not connected to anything. And it
> doesn't seem to serve any purpose.
>
> I have a feeling that in the original schematic somewhere along the
> line R30 got replaced by R24 (also 1 MOhm) but somehow R30 was never
> completely removed out of the schematic.
>
> What do y'all think, might that be the reason?
>
> 73, Floyd PD8F
>

645. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-05 00:06:50 UTC
From: wb0smx
Topic: 642 Message: 645

I believe Bob is correct...
The sidetone from Q13 Collector gets picked off by C65. Then it travels through R30 to the hot end of the sidetone level control V5. Because V5 is only 10K, and R30 is 1M, only about 1% of the tone level is available at the hot end of V5. So the purpose of R30 is to drop the sidetone level to a reasonable value eventual input to U3.

The wiper of V5 picks off some amount of the sidetone and sends it to U3, Pin 3, the + input of the final amplifier.

It looks like the confusion comes from the fact that the trace from R30 does appear to go to an empty hole. But the hole is plated through, connecting the two sides of the board, and the trace continues on the other side.
Randy wb0smx

--- In mmr40owngrp@yahoogroups.com, "bob bailey" <wb7dmx@...> wrote:
>
> look at the op amp U3, follow pin 3 to the center of VR5, which has one side grounded and the other side to R30, which then connects to C65, which then connects to Q13, I believe that this is for the side tone circuit.
>
> bob
> WB7DMX

646. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-05 04:59:29 UTC
From: veenstra_f
Topic: 642 Message: 646

Thank you all very much for helping me out. If you make the MMR40 using the Hendricks kit you will not encounter this problem, I'm sure it's been thoroughly checked and tested.
But I etched my own board using Steven KD1JV's original design and his own PCB layout at:
http://kd1jv.qrpradio.com/ARRLHBC/MMR40_SS_PCB.pdf It seems basically identical to the kit with only a few minor exceptions and that is probably why I got confused.

Try to think mirror image and take a look at the upper right section, a little left from the center. On the slightly larger circle pads V5 is soldered. Exactly like Bob and Randy stated; follow the trace from pin 3 of U3 to the wiper of variable resistor V5 of which one side is connected to ground. Now look at the immediate first two holes left of V4 and compare it to the component side:
http://kd1jv.qrpradio.com/ARRLHBC/MMR40_LAYOUT.pdf

You will notice R30 (1M) on the component side immediately right from V5: it is connected between the trace (base of Q4 to base of Q11) and .. nothing(!) There is not a wire connection there either. Just squashed between Q11 and V5 but not connecting anything.
But right above V5 is R24 (also 1M) connecting the side tone together with a wire lead and C65 to V4. Just like you both suggested.

So it seems that my R24 is called R30 in the Hendricks kit. My R24 (that's your R30) is connecting VR5 to VR4 but my R30 doesn't seem do anything.

There was also something weird with R19 which was also not connected to ground using the original PCB layout. In the schematics I found out it should so I grounded it anyway.

So I think you are right. And in my case R30 has become obsolete and I can just leave it out. But am I right in assuming that only 4 resistors of 1 M are used in the Hendricks kit? In that case there would be two slight hiccups in the original design.

I hope this makes sense to you all.

73, Floyd PD8F

647. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-05 05:02:50 UTC
From: veenstra_f
Topic: 642 Message: 647

'Now look at the immediate first two holes left
of V4 and compare it to the component side:'...

Sorry, that should read: '...two holes left
of V5 and compare...'

648. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-05 06:55:58 UTC
From: veenstra_f
Topic: 642 Message: 648

I also noticed pin 4 of U4 was not grounded in this PCB layout. Better double check everything before powering it up. :-(

649. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-05 07:24:50 UTC
From: veenstra_f
Topic: 642 Message: 649

I think I figured it out. Q11 appears to be a FET so where I
said `base' I meant `gate'. Looking at the schematic once more I
noticed that the gate of Q11 is connected at 4 point:
- cathode side of D3
- C59 (other end connects to ground)
- gate of Q4
- R24 (other end connects to ground)

Now my R30 is the same as R24 of the kit, so it should be connected to
ground as well. Q1 and Q4 are also swapped but both are 2N7000's.

I don't know why the codes of the components changed names in the kit
but at least it makes sense now.

Floyd PD8F

650. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-06 03:55:44 UTC
From: wb0smx
Topic: 642 Message: 650

Hello Fred. I think you are close, but might want to look at it one more time.

Please take a look at my blog entry at http://www.wb0smx.net/?p=387 <http://www.wb0smx.net/?p=387> It has a few pictures that may be useful.

The confusion seems to stem from the fact that on the parts placement diagram, the two resistors are not labeled the same as on the schematic. This is true in both the Kit Documentation and the ARRL Website Documentation.

So, R30 on parts placement = R24 on schematic, and R24 on parts placement = R30 on schematic.

The other problem brought up was that R30 (parts placement) had one end floating on the homebrew version of the PC board etching diagram. After tracing out the circuit, I believe that the floating end should be connected to ground.

I have overlayed the homebrew PC board pattern with the parts placement, and marked the traces for each circuit. The R24 (Parts placement) is marked in Green. It should connect between the V5 potentiometer and C65. It appears to be connected that way on both the kit and the homebrew PC boards, so no changes are necessary there.

The other Resistor (R30 on the Parts placement diagram) is marked in Red. One side should be grounded and the other goes to the junction of Q4 gate, Q11 gate, D3 cathode and C59.

In the "Homebrew" instructions, Steve shows that R24 should have one end grounded.

The Deadbug documentation also shows several other parts that should be grounded on one end, but the ground connection did not show up on the etching pattern for the homebrew PC board.

Finally, there was a question about whether the MMR40 really only used 4 1-Meg resistors, rather than the 6 in the parts inventory. The answer is that all 6 1-meg resistors are used:

* R16 - Connects to U8, pin 1 * R24(Parts Placement) - Connects to the V5 sodetone level pot (It is R30 in the schematic) * R30(Parts Placement) - Connects to Q11 gate (it is R24 on the Schematic). * R2 - Connects to the Q14 PTO gate * R8 - Connects to U7 pins 9,10 and 11 (5 volts) * R44 - Is part of the RF Probe and is not shown on the schematic

Hope this helps...

Randy wb0smx

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
>
> I think I figured it out. Q11 appears to be a FET so where I
> said `base' I meant `gate'. Looking at the schematic once more I
> noticed that the gate of Q11 is connected at 4 point:
> - cathode side of D3
> - C59 (other end connects to ground)
> - gate of Q4
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>
> Now my R30 is the same as R24 of the kit, so it should be connected to
> ground as well. Q1 and Q4 are also swapped but both are 2N7000's.
>
> I don't know why the codes of the components changed names in the kit
> but at least it makes sense now.
>
> Floyd PD8F
>

651. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-06 03:57:11 UTC
From: wb0smx
Topic: 642 Message: 651

Sorry, I meant Floyd, not Fred.

--- In mmr40owngrp@yahoogroups.com, "wb0smx" <rdpecken1@...> wrote:
>
>
> Hello Fred. I think you are close, but might want to look at it one
> more time.

652. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-07 10:29:29 UTC
From: veenstra_f
Topic: 642 Message: 652

--- In mmr40owngrp@yahoogroups.com, "wb0smx" <rdpecken1@...> wrote:
> Sorry, I meant Floyd, not Fred.

Ah, what's in a name. :-) Thanks for the extensive reply Randy. I had already figured it out but at least now I'm a 100% sure.

I used the original parts list and it states 5 pieces of 1 Meg resitors. R44 is not part of them and is not on the homebrew layout, couldn't find it in the scematic either. The kit seems to have some extra parts on it. For the frequency counter maybe?

Some things about the homebrew PCB you might want to add to your blog aswell to make it complete and avoid mistakes:

R19 is free floating at one side as well but should also be grounded.

Pin 4 of U4 is floating freely aswell but should also be connected to ground.

And in case someone is using Steven's first PDF file of Jan. 2nd 2007 (like me): R14 is mistakenly named R34 here on the homebrew layout. I put the file on my own server: http://www.wiccaweb.nl/PD8F/KD1JV-MMR40.pdf (PCB layout at bottom)
In later documents and also the kit it is called R14.

Thanks again!

Floyd PD8F

653. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-07 10:32:27 UTC
From: veenstra_f
Topic: 642 Message: 653

Broke off weird:
http://www.wiccaweb.nl/PD8F/KD1JV-MMR40.pdf

654. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-07 10:46:11 UTC
From: veenstra_f
Topic: 642 Message: 654

Randy,

Looking at your website there seem to be at least three different homebrew layouts circulating. Maybe even more.
The one on your website:
http://www.wb0smx.net/wp-content/uploads/2009/02/ckt_board_layers.jpg
cannot be correct. Look at R15 and R19. They are connected parallel and run to R7a and R7b. But the top of R19 should definately be connected to ground!

Confusing isn't it?

73, Floyd

655. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-07 16:01:46 UTC
From: wb0smx
Topic: 642 Message: 655

Yes Floyd... It it confusing at times. I see the same problem with the Bitx20 design. There are at least 3 versions of that which have fairly significant differences. At least the MMR40 only has minor diferences.

The overlay on my website was built from the QST Binaries files: MMR40_LAYOUT.pdf and MMR40_SS_PCB.pdf

I just resized them and tried to overlay them to get the traces to coincide with the parts layout. I was pretty successful in getting the area we were specifically talking about to line up, but I couldn't get the whole thing to line up exactly, so certian parts of the board are misaligned from each other. I don't think the parts placement is drawn to scale. The R15 and R19 area is off such that the components would need to slide to the right a little bit. Even then, the resistors would not be tall enough to reach the two holes on top.

Anyway, by looking at the PCB etch by itself, I can see that R15 and R19 are connected together at the bottom, and the trace goes to C37. The tops of R15 and R19 are not connected together. R15 goes to R7a/R7b, while R19 goes to a floating pad, as you point out. And yes, indeed, the top of R19 should be grounded.

I'll add the info about the "missing grounds" to my post. I'm not trying to document the whole building process on my blog, but rather trying to analyze the electronincs, as a learning experience. I'm sure learning a lot about photoshop and ltspice, so far!

Glad you got things figured out. 73 de Randy wb0smx

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
>
> Randy,
>
> Looking at your website there seem to be at least three different
> homebrew layouts circulating. Maybe even more.
> The one on your website:
> http://www.wb0smx.net/wp-content/uploads/2009/02/ckt_board_layers.jpg
> cannot be correct. Look at R15 and R19. They are connected parallel and
> run to R7a and R7b. But the top of R19 should definately be connected
> to ground!

>
> Confusing isn't it?
>
> 73, Floyd
>

656. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-08 09:54:07 UTC
From: veenstra_f
Topic: 642 Message: 656

I haven't got my BITX20 working properly either. But I want to finish the MMR40 first. Almost there: I still have to wind the Amidon coils and put them in and add the extra wiring. So I hope to finish it in the next couple of days. I hope it works, fingers crossed.

Today I discovered another flaw: the source of Q12 is not grounded either.

I corrected the errors I know off and put the layout (unfortunately I only have it in single layer) on my server:
http://www.wiccaweb.nl/PD8F/homebrew_PCB_MMR40.jpg
But I think this one is pretty accurate now. You can use it if you like.

- R24 and R30 are still the other way round but that doesn't really matter since their both 1 Meg. R30 is now grounded in this image.

- Pin 4 of U4 is grounded.

- R19 is grounded.

- Q12 source side is grounded.

Maybe you want to highlight those areas with defects, I also put a file on the server in PSP format (Paint Shop Pro). You can edit that one.
http://www.wiccaweb.nl/PD8F/homebrew_PCB_MMR40.psp

BTW: What does the BBS swith do: simply lower the frequency by about 100 kHz?

Bye! Floyd

657. Confusing coil L2

Yahoo group: mmr40owngrp
Date: 2009-02-08 14:52:06 UTC
From: veenstra_f
Topic: 657 Message: 657

The more I read about winding L2 the more confused I get. The images also clearly contradict the written instruction. 'Counter clockwise' towards you or away from you? There's a big difference.

To settle this once and for all, please take a look at this image I made:
http://www.wiccaweb.nl/PD8F/coil.jpg

Is this how the coil schould be wound and placed? And does front and back make a difference, I mean turning it 180 degrees?

If this image is correct I will add it to the files section.

Floyd PD8F

658. Re: [mmr40owngrp] Confusing coil L2

Yahoo group: mmr40owngrp
Date: 2009-02-08 15:47:03 UTC
From: Dick
Topic: 657 Message: 658

Looks pretty clear to me...

On Sun, Feb 8, 2009 at 6:52 AM, veenstra_f <veenstra_f@...> wrote:

> The more I read about winding L2 the more confused I get. The images
> also clearly contradict the written instruction. 'Counter clockwise'
> towards you or away from you? There's a big difference.
>
> To settle this once and for all, please take a look at this image I
> made:
> http://www.wiccaweb.nl/PD8F/coil.jpg
>
> Is this how the coil schould be wound and placed? And does front and
> back make a difference, I mean turning it 180 degrees?
>
> If this image is correct I will add it to the files section.
>
> Floyd PD8F
>
>
>

659. Re: What is R30 for ?

Yahoo group: mmr40owngrp
Date: 2009-02-08 21:34:48 UTC
From: wb0smx
Topic: 642 Message: 659

Floyd, Nice job finding the "non-grounded" leads. I wonder if you are the only person building this with a homemade PC board? Please feel free to leave a comment on the post on my blog www.wb0smx.net <http://www.wb0smx.net/> to help document the flaws you have discovered. You could put a link to your drawing in the comments. I do not personally want to document the flaws you have discovered, as I did not do the work. So anything I would put on there is not of my experience.

The "BSS" is the band segment select. On the kit it uses a switch, instead of just header pins. Basically it connects a 33pf capacitor in parallel with the main 330pf frequency determining capacitor in the "Phone" position. The extra capacitance lowers the frequency of the PTO about 130 khz on my rig. That results in raising the final 40-meter frequency by a like amount.
Mine ended up covering:
7.025 - 7.159 in the "CW" band position, and
7.158 - 7.286 in the "Phone" band position

73... Randy wb0smx

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
> Maybe you want to highlight those areas with defects, I also put a
> file on the server in PSP format (Paint Shop Pro). You can edit that
> one.
> http://www.wiccaweb.nl/PD8F/homebrew_PCB_MMR40.psp
>
> BTW: What does the BBS swith do: simply lower the frequency by about
> 100 kHz?
>
> Bye! Floyd
>

660. Re: Confusing coil L2

Yahoo group: mmr40owngrp
Date: 2009-02-08 21:59:46 UTC
From: wb0smx
Topic: 657 Message: 660

I have placed an L2 Winding Diagram in the "Construction Details" photo folder on the Yahoo Group. This diagram can also be seen on my blog at http://www.wb0smx.net/?p=416 <http://www.wb0smx.net/?p=416>

Note how you should not have to cross any wires to get them in the correct holes on the PC board. It should just drop straight in. I suspect that it wouldn't matter if you turned the toroid 180 degrees, as the feedback wires would still go into the feedback holes, and the primary windings would still go into the primary holes. They would still be in phase with each other, by having been wound in the same direction on the core.

Good luck... Randy wb0smx

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
>
> The more I read about winding L2 the more confused I get. The images
> also clearly contradict the written instruction. 'Counter clockwise'
> towards you or away from you? There's a big difference.
>
> To settle this once and for all, please take a look at this image I
> made:
> http://www.wiccaweb.nl/PD8F/coil.jpg
>
> Is this how the coil schould be wound and placed? And does front and
> back make a difference, I mean turning it 180 degrees?
>
> If this image is correct I will add it to the files section.
>
> Floyd PD8F
>

661. Re: Confusing coil L2

Yahoo group: mmr40owngrp
Date: 2009-02-09 02:32:46 UTC
From: veenstra_f
Topic: 657 Message: 661

That is very clear Randy. So you did wind it clockwise and
not 'counter clockwise' like it says in the instructions. Assuming
you look at it from left to right, in 'reading' direction of course.
And going round the coil it makes sense, the wires come down on the
other side again.

Just one thing, and I don't want to be nitpicking here, just trying
to get it clear. On my board the MAIN and FEEDBACK near the yellow
arrow 'Front of MMR40' are exacly the other way round. The same goes
for the two connections FEEDBACK/MAIN at the back.

I see in the scematic that the Main part of coil L2 should be placed
in series with L1. In that case MAIN and FEEDBACK should be the other
way round.
If you look at the componentside of the board the startingpoint of L1
goes via the trace to the hole at the back closest to L1. That should
be MAIN, not FEEDBACK.

I hope you understand what I mean, it is complicated to explain. If
you look at the instructions and images there are 8 ways to wind the
coil and 7 of them are the wrong way. :-(

But, thanks to you, there are now only 2 ways left from my point of
view. Maybe it should be wound CC after all and then working your way
round the coil in a CC fashion as well?

Hope you are still in good mental health after all this :-)

73, Floyd

662. Re: Confusing coil L2

Yahoo group: mmr40owngrp
Date: 2009-02-09 03:37:39 UTC
From: veenstra_f
Topic: 657 Message: 662

Compairing it with the schematic I think this is the only right way to wind and connect it. Winding counterclockwise and adding turns in a counterclockwise fashion around the toroid. Starting from the front and sticking it towards the back all the time. [So not the front like it says in the instruction. And the image of the 'bottom view' is basically correct but it should state 'top view' instead in that case] This way the beginnings and ends also match up with the holes in the board.

http://www.wiccaweb.nl/PD8F/coilL2.jpg

What do you think Randy?
Unless you already got your rig working winding it your way of course. In that case I better stick to that. Then the instruction should have sayed it had to be wound clockwise but the turns had to be added counterclockwise around the toroid.

Floyd

663. Re: Confusing coil L2

Yahoo group: mmr40owngrp
Date: 2009-02-10 02:44:40 UTC
From: wb0smx
Topic: 657 Message: 663

Ah Yes, Floyd. I see you have found another difference between the Kit version of the MMR40 and the Homebrew PCB version that you are using.

I've detailed the differences for the L2 winding on my blog again, at http://www.wb0smx.net/?p=429 <http://www.wb0smx.net/?p=429>

So, as you say, the Homebrew version swaps the connections for the 4 pads that L2 mounts on, when compared to the Kit that I used. It looks to me that you would end up winding the coil just the opposite for the Kit, as per my drawing at the bottom of the post mentioned above. I'll also drop the drawing into the Construction Details folder on Yahoo Groups.

And I'm not completely crazy yet, so my mental state is still OK, :>).

Take a look at my drawing for the Homebrew version of L2 and see if it looks like it will work for your rig.

73 de Randy wb0smx

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
>
> Just one thing, and I don't want to be nitpicking here, just trying
> to get it clear. On my board the MAIN and FEEDBACK near the yellow
> arrow 'Front of MMR40' are exacly the other way round. The same goes
> for the two connections FEEDBACK/MAIN at the back.
>

> But, thanks to you, there are now only 2 ways left from my point of
> view. Maybe it should be wound CC after all and then working your way
> round the coil in a CC fashion as well?
>
> Hope you are still in good mental health after all this :-)
>
> 73, Floyd
>

664. Re: Confusing coil L2

Yahoo group: mmr40owngrp
Date: 2009-02-10 13:54:52 UTC
From: veenstra_f
Topic: 657 Message: 664

That is nice, so we found another difference kit/homebrew. Since I don't owne the kit I assumed the wiring of the toroid was the same as in the hombrew circuitboard. But it seems feedback and main are the other way round.

Now that I know how it should be done the description makes a lot more sense. They should add an image in the building description, a picture paints a thousand words.
Yes Randy, the image on your website seems correct and accurate to me.

I'm currently adding the extra wiring to complete the board. This evening I will check (and doublecheck) the solderside once more with a magnifyingglass and a multimeter making absolutely sure there are no shortcuts anywhere. I had already found 2 very tiny hair cracks in the traces, that is the risk you take when making your own board.

Then I'll put the power on and hope to pass the smoke test. I'll test the receiving part first before putting the IRF510 in.

I noticed you had some scope images on your website, they may be helpfull when i need aligning or troubleshoot it.
I'll let you know how thing turned out.

73, Floyd

--- In mmr40owngrp@yahoogroups.com, "wb0smx" <rdpecken1@...> wrote:
> Ah Yes, Floyd. I see you have found another difference between the
Kit
> version of the MMR40 and the Homebrew PCB version that you are
using.
>
> I've detailed the differences for the L2 winding on my blog again,
at
> http://www.wb0smx.net/?p=429 <http://www.wb0smx.net/?p=429>
>
> So, as you say, the Homebrew version swaps the connections for the 4
> pads that L2 mounts on, when compared to the Kit that I used. It
looks
> to me that you would end up winding the coil just the opposite for
the
> Kit, as per my drawing at the bottom of the post mentioned above.
I'll
> also drop the drawing into the Construction Details folder on Yahoo
> Groups.
>
> And I'm not completely crazy yet, so my mental state is still

OK, :>).
>
> Take a look at my drawing for the Homebrew version of L2 and see if
it
> looks like it will work for your rig.
>
> 73 de Randy wb0smx

665. Low audio level

Yahoo group: mmr40owngrp
Date: 2009-02-18 04:08:42 UTC
From: veenstra_f
Topic: 665 Message: 665

I was a couple of days unable to work on the MMR40 but today I finished adding the last components and additional wiring except for the IRF510. I want to see if the reception works well first, and later check the TX part.

A 5W loudspeaker and a longwire antenna were connected. When powering it up the audio hiss is very low. And with switch S1 set to narrow even less noise, hardly audible. But basically that makes sense, on narrow band you usually hear less noise.

At the moment (5 am here) there is no propagation on the 40 meter band but I would expect a little more than just a minimal hiss.
I checked the +13.8 DV at several points and they all seem to be there. Also the 78L05's seem to work: U1 has a 4.98 and U2 a 4.97 Volts output. There is 13.6 Volt on pin 6 (+Vcc) of the LM386 audio amp. The OpAmps LM358AM 15.6 Volts on pin 8 (+Vcc) as well. The SA612AN mixers/oscillators have 4.98 V (+Vcc) on pin 8. And multiplexer 74HC4053N has 4.98 V on pin 16.
So the IC's all seem to get the right amount of voltage.

Turning the BFO and T1 do not seem to have any effect. I had expected a higher/lower pitch of the noise changing the BFO frequency.

Is there anything I can (should) check first?

73, Floyd PD8F

666. Re: Low audio level

Yahoo group: mmr40owngrp
Date: 2009-02-18 04:13:54 UTC
From: veenstra_f
Topic: 665 Message: 666

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
> LM358AM 15.6 Volts on pin 8 (+Vcc) as well. ...

Typo: That should be 13.6 V of course.

667. Re: Low audio level

Yahoo group: mmr40owngrp
Date: 2009-02-19 02:36:16 UTC
From: wb0smx
Topic: 665 Message: 667

Hello Floyd, Good to hear you are making progress.

Based on your description, my first guess would be a problem with one of the oscillators, maybe just an alignment. But I always start at the audio stage of a receiver and work from there, so...

With no antenna connected, and my multimeter connected across the speaker leads, I read only about 6 millivolts RMS (with the meter reading AC voltage). When I connect an antenna, the background noise increases very noticably, and the noise level across the speaker increases to about 115 millivolts with no signal tuned in.
The noise is considerably lower with the narrow filter switched in, as you noted.

One easy thing to check is the audio stages.

When I touch a bare wire from my hand to pin 2 of the LM386 (U3 in the kit) I hear a low hum, and in my case, I'm actually picking up a local AM broadcast station that is being rectified. The signal level on the meter goes up to about 20 millivolts RMS. It would probably be less without the local broadcast interference.

When I move this wire to pin 2 of the LM358 (U8 in the kit), the hum gets much louder, and the signal level across the speaker goes up to about 1.4 volts RMS. Again, this may be lower without the broadcast interference.

So I would say that if you are hearing low hum with the wire on pin 2 of the lm386, and high hum with the input on the input of the LM358, then your audio stages are probably good.

If you are satisfied with that test, then I would suggest checking the oscillators for operation.

If you have a general coverage receiver, you can do a quick check of the oscillators.

The 10mhz BFO can be heard if I lay a wire connected to the antenna of my general coverage receiver near the U5 bfo/mixer of the MMR40. I get a peak of a strong S8 on my receiver, with a zero beat of about 10.00282 Mhz for me. That could be a little different for you, but should be somewhere close, say within 5 khz of 10 mhz. You should be able to tune the bfo trimmer and hear the tone change in you general coverage receiver.

Similarly, by laying the antenna wire near L1/L2 PTO coils, you should be able to hear the PTO oscillating somewhere around 2.5 to

3.5 mhz. Again, I pick up about an S-9 signal on my general coverage
TS-480 receiver.
My PTO frequencies, after final adjustment were:
2.841 - 2.975 in lower band position
2.714 - 2.842 in upper band position

Hope this helps. If you need more help, please let us know what
equipent you have to help troubleshoot - Meters, scope, signal
source, general coverage receiver, computer with soundcard, etc.

Good luck...
Randy wb0smx

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...>
wrote:
> Turning the BFO and T1 do not seem to have any effect. I had
expected a
> higher/lower pitch of the noise changing the BFO frequency.
>
> Is there anything I can (should) check first?
>
> 73, Floyd PD8F
>

668. Re: Low audio level

Yahoo group: mmr40owngrp
Date: 2009-02-20 01:45:15 UTC
From: veenstra_f
Topic: 665 Message: 668

Thanks very much Randy. Yes progress made but not there yet. I will work my way thru your reply in order to figure out where things go wrong.

It did pass the smoke test and I'm happy about that. Secondly, at least there is *some* audio: however little it may be. And the switching to narrow band decreases the audio level so that part (combination U8/U3) seems to work just fine.
Connecting and disconnecting the antenna does not make any difference at all. It seems the noise I hear is mostly generated within the components themselves, it doesn't seem to come from the outside of the receiver much.

Before I forget: I have a multimeter (no RF probe) and an old 20 MHz scope which is a little worn (blurry image) but still works. So if you have some more suggestions, I have the use of a scope.

The audio amp I used was the NJM368D (as described in the initial parts list), it's equivalent to the LM-386D. Touching the input pin 2 had no effect.
I didn't have an original LM386D but I eventually found a LM386N in my junkbox, the only difference with the D type is that this N has max. 900 mW output while the indicated type D has only 300 mW output. According to the datasheet they are otherwise identical and since I use a 5 W speaker that will do just fine so I put that one in the socket. But there was no noticeable increase in noise level. Also touching pin 2 didn't change anything. Only a faint hiss.

The BFO signal is definitely there, I can clearly hear it on my FT817 set to LSB and laying a wire over the board. The signal is strongest near U5, which is the oscillator for the 10 MHz signal so that makes sense.
In my case the zero beat is at 10.00214 MHz at its lowest point, turning the BFO trimmer all the way up I can reach 10.00660 MHz maximum. So the BFO oscillator seems to work very well and has a range of about 4.5 kHz. When adjusted correctly it should be able to cut off the upper side band of any signal as intended. I'm glad that part works just fine.

But the PTO oscillator does not seem to work at all, I does not generate a signal anywhere between 2.0 and 3.0 MHz on my receiver. So I attached the scope on the anode side of D1. Nothing there, and nothing near U6 either, so there is no variable frequency signal to subtract in the multiplexer.

Thinking this thru logically: the receiver should now be set to the BFO frequency of 10 MHz minus the PTO frequency of 0 MHz by the multiplexer. Basically it would be on a fixed frequency of around 10 MHz since the PTO section does not vary or even work.
So I set my FT817 to 10.0025 MHz LSB and talked in the microphone. Lo and behold: I can hear myself on the MMR40 ! The audio level is still very low but I can clearly hear myself.

It seems there are still two things wrong: the low audio level and the PTO not working.
Now the PTO section is basically a secluded part of the schematic and only connected with the rest of the circuit by C6. If I take out C6 the PTO circuit should be able to generate a signal by itself. The power is supplied by U1, I checked it and it is giving off 4.97 Volts. I will check the connections and solder pads very carefully once more, possibly the thin magnet wire of L1 is not making good contact. I'll have to draw the magnifying glass once more out of the holster, yes I'm really becoming an old man.

About the low audio. Because I can only get metric wire here (in millimeters) some coils may slightly vary from the AWG standard. Can that cause a decrease in audio anywhere?

I'll check the PTO section first and get back to you on that. Thanks for now Randy! If you come up with some more suggestions in the meantime, just let me know okay? I appreciate it very much.

Bye, Floyd

669. Re: Low audio level

Yahoo group: mmr40owngrp
Date: 2009-02-22 00:06:03 UTC
From: wb0smx
Topic: 665 Message: 669

Hi Floyd.

Good to hear that you passed the smoke test. That's an important one!

It does sound like the U8 portion of the circuit is working correctly.

No noise difference when the antenna is plugged in certainly makes it sound like you have at least an IF/RF stage problem.

A scope will probably come in handy in your troubleshooting. That's a good thing to have on hand, even if it is a little old. Mine is about 30 years old, and still mostly works OK. And don't discount the multimeter. It's not only good for DC voltages, but it can read the AC RMS voltages at audio frequencies, as well.

It sounds like your BFO is probably working OK. We'll assume so for now.

Even though you have some audio output, it still bothers me that you get no hum of any kind when you touch pin 2. I'm assuming you did that test with the volume control turned all the way up, so as not to be loading down pin 2 by grounding it through the wiper of the volume control.

You also have a built-in audio source for testing, in the form of the transmit sidetone oscillator on pin 3 of the LM-386. To enable this, you must put the rig in CW mode, and transmit. If you have the IRF-510 removed, you shouldn't have any problem with the final output overheating from too much transmitting at this point.

I've detailed the setup and provided some waveforms and voltages for debugging the final audio amp on my blog at http://www.wb0smx.net/?p=438 <http://www.wb0smx.net/?p=438>

As for the PTO, I can think of a couple of things to check...

You should be seeing 4.5 to 5.0 vpp at 2 to 3 mhz on the gate of Q14.

I just measured the DC voltages on the Q14 oscillator JFET.

Q14 Drain (Vcc) = 5.04 vdc

Q14 Source = 0.435 vdc

Q14 Gate = -1.32 vdc

Can you check for vcc on the drain of Q14?

Also, several people had problems with not getting the enamel scrapped off of the coil wires to make a good solder joint. You should read

somewhere around zero ohms to ground on the main windings of L1 and L2 (with power disconnected, of course). That would be on both of the Main connections on the board for L1 and L2. If one or more of them is too high, you probably have a bad solder joint on one or more of those connections, or the ground connection of L1.

I read about 50 ohms to ground from the Feedback windings of L2. This is coming from the R1 resistor, or course. This same 50 ohms should be on the source of Q14.

Another common mistake is installing D1 backwards. Please check to make sure that the Anode (no band) is connected to the gate of Q14.

Other than that, you can compare the waveforms you see with the ones from my scope at http://www.wb0smx.net/?p=324 <http://www.wb0smx.net/?p=324>

Finally, I don't think that a slightly different size wire will make much difference. As long as you get about 39 turns on L1 in the space allotted, and about 28 turns on the toroid L2, along with 5 turns on the feedback winding, you should be good. Even if it was off some, you would have some waveform at the Q14 gate, but perhaps at the slightly wrong frequency.

Hope this all helps...

73 de Randy wb0smx

--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
> Connecting and disconnecting the antenna does not make any difference
> at all. It seems the noise I hear is mostly generated within the
> components themselves, it doesn't seem to come from the outside of
> the receiver much.
>
> The BFO signal is definitely there, I can clearly hear it on my FT817
> set to LSB and laying a wire over the board. The signal is strongest
> near U5, which is the oscillator for the 10 MHz signal so that makes
> sense.
>
> But the PTO oscillator does not seem to work at all, I does not
> generate a signal anywhere between 2.0 and 3.0 MHz on my receiver. So
> I attached the scope on the anode side of D1. Nothing there, and
> nothing near U6 either, so there is no variable frequency signal to
> subtract in the multiplexer.
>
> It seems there are still two things wrong: the low audio level and
> the PTO not working.
>
> About the low audio. Because I can only get metric wire here (in
> millimeters) some coils may slightly vary from the AWG standard. Can
> that cause a decrease in audio anywhere?
>

> I'll check the PTO section first and get back to you on that. Thanks
> for now Randy! If you come up with some more suggestions in the
> meantime, just let me know okay? I appreciate it very much.
>
> Bye, Floyd
>

670. DOA MMR-40

Yahoo group: mmr40owngrp
Date: 2009-02-22 23:47:08 UTC
From: Dean Davis
Topic: 670 Message: 670

Greetings,

Last weekend I purchased a MMR-40 with the new case and dial for $100 and I have been unable to get it working. Is Steve still offering repair work for the MMR-40.

Dean, N7XG

671. Re: Low audio level

Yahoo group: mmr40owngrp
Date: 2009-02-24 00:55:01 UTC
From: veenstra_f
Topic: 665 Message: 671

Thanks Randy,

I haven't had much time to look at it yet and only checked the tuning section. I also measure zero volts on L1 and L2 due to the fact that they are both connected and one side to ground. So that seems okay. The cathode side of D1 is connected to ground, anode to gate of Q14. The feedback ends of the coil are slightly under 50 ohms, like you said: because of R1 connecting it to ground.

In my case the DC voltages on Q14 are:

Drain = 4.928
Source = 1.119
Gate = -0.037

The drain voltage makes sense, it is connected to the aprox. 5 V out of the 78L05. The source voltage is quite a lot higher than yours and the gate a lot lower. And I start wondering if I may have made the wrong pinout on Q14.

Please take a look at this image, it is top view on the board:
http://www.wiccaweb.nl/PD8F/Q14.jpg
This is the way I connected Q14 to the board. I added s, g and d in red. According to the instructions the middle wire should be bent to the flat side, so this is the only way it can be connected. This is consistent with the schematic.

But now take a look at Steve's own website:
http://kd1jv.qrpradio.com/ARRLHBC/ARRL_MMR40.html and in particular the dead bug layout image about half way down the page. Here the drain is connected to C1 (instead of the gate), the gate connected to the feedback coil (instead of the source) and the source connected to the 78L05 (instead of the drain).

What do you think, do I have the g s and d the wrong way round? Since the J310 is an RF amp it makes sense that the gate is connected to the LC circuit. But what about the source and drain?

Floyd

672. Re: Low audio level

Yahoo group: mmr40owngrp
Date: 2009-02-25 01:19:01 UTC
From: wb0smx
Topic: 665 Message: 672

Hi Floyd,

I would guess that the voltage difference on your gate is due to the circuit not oscillating.

The way you have Q14 connected is exactly the same way as mine, which is working.

Looking at every datasheet I could find for the J310 transistor, the pinout, when looking at the flat side, with the leads down, is:

Drain, Source, Gate... From left to right.

That is the way you have labeled yours on your layout diagram. My drain is connected to C3, which is +5 volts, the source is connected to the feedback winding, and the gate is connected to C1, the coupling capacitor from the L1 coil.

I believe that the layout drawing on Steve's site is in error. It is close, but the markings for the Q14 transistor are incorrect, assuming his J310 is like most others, and the ones shipped in the kits.

Basically, I think this is a top view of the deadbug board, with the J310 sitting on it's head, so the leads poke up in the air.

If you look at it that way, the leads would be (from top to bottom on the drawing) Gate on the top, going to C1, Source in the middle, going to the Feedback Winding, and Drain on the bottom of the transistor drawing, going to 5 volts. But they are simply labeled incorrectly.

Also, I see that in Pinouts drawing more toward the top of the document, he shows the J310 having Source, Drain, Gate from left to right. This could be correct for his particular Jfet, as I know some manufacturers label theirs differently from different batches. I have read in several places that the J310 is a symmetrical JFET, meaning that it works the same if you swap the Drain and Source leads.

So, it would be easy enough to swap you leads around, but I don't think that will help your problem.

What else could be wrong? Bad transistor, feedback windings out of phase (not wound in same direction as the main winding).

There's not much more to go wrong, other than solder joints or bridges. If you have the capability to take a clear, large photo of that part of your circuit, I would be glad to look and see if I can see anything.

Good luck... Randy wb0smx
--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...> wrote:
>
> Thanks Randy,
>
> I haven't had much time to look at it yet and only checked the tuning
> section. I also measure zero volts on L1 and L2 due to the fact that
> they are both connected and one side to ground. So that seems okay.
> The cathode side of D1 is connected to ground, anode to gate of Q14.
> The feedback ends of the coil are slightly under 50 ohms, like you
> said: because of R1 connecting it to ground.
>
> In my case the DC voltages on Q14 are:
>
> Drain = 4.928
> Source = 1.119
> Gate = -0.037
>
> The drain voltage makes sense, it is connected to the aprox. 5 V out
> of the 78L05. The source voltage is quite a lot higher than yours and
> the gate a lot lower. And I start wondering if I may have made the
> wrong pinout on Q14.
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> Please take a look at this image, it is top view on the board:
> http://www.wiccaweb.nl/PD8F/Q14.jpg
> This is the way I connected Q14 to the board. I added s, g and d in
> red. According to the instructions the middle wire should be bent to
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> But now take a look at Steve's own website:
> http://kd1jv.qrpradio.com/ARRLHBC/ARRL_MMR40.html and in particular
> the dead bug layout image about half way down the page. Here the
> drain is connected to C1 (instead of the gate), the gate connected to
> the feedback coil (instead of the source) and the source connected to
> the 78L05 (instead of the drain).
>
> What do you think, do I have the g s and d the wrong way round? Since
> the J310 is an RF amp it makes sense that the gate is connected to
> the LC circuit. But what about the source and drain?
>
> Floyd
>

673. Re: Low audio level

Yahoo group: mmr40owngrp
Date: 2009-02-26 02:18:06 UTC
From: wb0smx
Topic: 665 Message: 673

Floyd,
I believe I know why your PTO is not oscillating.

Based on the way the Homebrew PC board is wired, it looks like you may need to reverse the two feedback leads.
This goes against anything we (most of the Kit builders) learned about dropping the leads straight into the holes, as we discussed before.
But I have examined the Homebrew PCB closer, and compared it against the Kit PCB. In order to keep the feedback winding in phase with the primary, the feedback leads must be crossed on the Homebrew PCB.

I explain my reasoning in more detail, with pictures at my blog:
http://www.wb0smx.net/?p=452 <http://www.wb0smx.net/?p=452>

Have a look, and see if you agree.

73 de Randy wb0smx

--- In mmr40owngrp@yahoogroups.com, "wb0smx" <rdpecken1@...> wrote:
>
>
> Hi Floyd,
>
> I would guess that the voltage difference on your gate is due to the
> circuit not oscillating.
>
> The way you have Q14 connected is exactly the same way as mine, which
is
> working.
>
> Looking at every datasheet I could find for the J310 transistor, the
> pinout, when looking at the flat side, with the leads down, is:
>
> Drain, Source, Gate... From left to right.
>
> That is the way you have labeled yours on your layout diagram. My
drain
> is connected to C3, which is +5 volts, the source is connected to the
> feedback winding, and the gate is connected to C1, the coupling
> capacitor from the L1 coil.
>
> I believe that the layout drawing on Steve's site is in error. It is
> close, but the markings for the Q14 transistor are incorrect, assuming
> his J310 is like most others, and the ones shipped in the kits.
>
> Basically, I think this is a top view of the deadbug board, with the

> J310 sitting on it's head, so the leads poke up in the air.
>
> If you look at it that way, the leads would be (from top to bottom on
> the drawing) Gate on the top, going to C1, Source in the middle, going
> to the Feedback Winding, and Drain on the bottom of the transistor
> drawing, going to 5 volts. But they are simply labeled incorrectly.
>
> Also, I see that in Pinouts drawing more toward the top of the
document,
> he shows the J310 having Source, Drain, Gate from left to right. This
> could be correct for his particular Jfet, as I know some manufacturers
> label theirs differently from different batches. I have read in
several
> places that the J310 is a symmetrical JFET, meaning that it works the
> same if you swap the Drain and Source leads.
>
> So, it would be easy enough to swap you leads around, but I don't
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> that will help your problem.
>
> What else could be wrong? Bad transistor, feedback windings out of
> phase (not wound in same direction as the main winding).
>
> There's not much more to go wrong, other than solder joints or
bridges.
> If you have the capability to take a clear, large photo of that part
of
> your circuit, I would be glad to look and see if I can see anything.
>
> Good luck... Randy wb0smx
> --- In mmr40owngrp@yahoogroups.com, "veenstra_f" veenstra_f@ wrote:
> >
> > Thanks Randy,
> >
> > I haven't had much time to look at it yet and only checked the
tuning
> > section. I also measure zero volts on L1 and L2 due to the fact that
> > they are both connected and one side to ground. So that seems okay.
> > The cathode side of D1 is connected to ground, anode to gate of Q14.
> > The feedback ends of the coil are slightly under 50 ohms, like you
> > said: because of R1 connecting it to ground.
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> > In my case the DC voltages on Q14 are:
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> > Drain = 4.928
> > Source = 1.119
> > Gate = -0.037
> >
> > The drain voltage makes sense, it is connected to the aprox. 5 V out
> > of the 78L05. The source voltage is quite a lot higher than yours

and
> > the gate a lot lower. And I start wondering if I may have made the
> > wrong pinout on Q14.
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> > Please take a look at this image, it is top view on the board:
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> > But now take a look at Steve's own website:
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> > the dead bug layout image about half way down the page. Here the
> > drain is connected to C1 (instead of the gate), the gate connected
to
> > the feedback coil (instead of the source) and the source connected
to
> > the 78L05 (instead of the drain).
> >
> > What do you think, do I have the g s and d the wrong way round?
Since
> > the J310 is an RF amp it makes sense that the gate is connected to
> > the LC circuit. But what about the source and drain?
> >
> > Floyd
> >
>

674. Re: Low audio level

Yahoo group: mmr40owngrp
Date: 2009-03-01 23:03:00 UTC
From: veenstra_f
Topic: 665 Message: 674

Hi Randy,

Sorry I haven't been able to respond to your messages for the last couple of days. I run my own business and sometimes my customers want everything done by yesterday at the latest. :-) So I've been very busy lately and even during the weekend.

So the feedback coil has to be in phase with the main? I was under the impression that the feedback part was supposed to work *against* the main inductance thus reducing it slightly. But if you are right they should be the other way round.
The wiring is otherwise correct and makes good contact everywhere and there doesn't seem to be any short circuit anywhere. So I think this might solve the problem: finger scrossed.

I will have a go at it as soon as I have some more spare time, hopefully tomorrow. And I'll let you know how it turned out.

Thanks!

73, Floyd

--- In mmr40owngrp@yahoogroups.com, "wb0smx" <rdpecken1@...> wrote:
>
>
> Floyd,
> I believe I know why your PTO is not oscillating.
>
> Based on the way the Homebrew PC board is wired, it looks like you may
> need to reverse the two feedback leads.
> This goes against anything we (most of the Kit builders) learned about
> dropping the leads straight into the holes, as we discussed before.
> But I have examined the Homebrew PCB closer, and compared it against the
> Kit PCB. In order to keep the feedback winding in phase with the
> primary, the feedback leads must be crossed on the Homebrew PCB.
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> I explain my reasoning in more detail, with pictures at my blog:
> http://www.wb0smx.net/?p=452 <http://www.wb0smx.net/?p=452>
>
> Have a look, and see if you agree.
>
> 73 de Randy wb0smx

675. Re: Low audio level

Yahoo group: mmr40owngrp
Date: 2009-03-02 02:55:48 UTC
From: veenstra_f
Topic: 665 Message: 675

Hi Randy,

I couldn't resist the temptation of trying it right now and switched the feedback wires. But there didn't seem to be any VFO signal between 1 and 5 MHz. on my receiver. Lots of signals this time of night even on a small piece of wire, some that even sound a bit like a oscillator, but I could rule them all out by turning the power off.
So I checked with the scope on the ground of Q14 and there is only a very tiny signal of about (estimated) 3 to 4 mV visible, almost too small to visualise on the scope.
On the timescale division of 2 microsecond and the finetune all the way to the left about one and a half wave fit in a square. On timescale 5 microsecond and fine tune in the middle about two waves fit in. So it seems to be somewhere between 1 and 5 MHz.

And when I unhooked the probe something really weird happened. The probe slipped, I dropped it and it fell on the table close to the PTO . I noticed a huge sine wave on the scope. When I put the probe above the PTO coil there is an enormous sine wave visible on the scope. It is about 200 mV pp and a perfect sine wave. This only happens when the probe is disconnected! And it doesn't matter if the ground clamp is on or off. (this could be due to the fact that all sockets and appliances in this house are grounded)
When I connect it back to the ground of Q14 the sine wave virtually disappears. The signal frequency is the same but only the 3-4 mV remain.
I connected it to the source of Q14 and got an even higher voltage there: around 1.6 V pp ! Wow, so there is a huge signal there, why can't I hear it on my receiver?

And why is the signal reduced to almost nothing by J310 instead of amplified like it's supposed to?

The voltages on Q14 are now:
D: 4.95
S: 2.45
G: -4.60

Any idea?

73, Floyd

676. Re: Low audio level

Yahoo group: mmr40owngrp
Date: 2009-03-02 13:02:23 UTC
From: wb0smx
Topic: 665 Message: 676

Hello Floyd.
Just a quick note before I go off to work.
It sounds like the PTO is now oscillating, as we had hoped.
The high negative voltage on the gate is a good indication of that,
as well as the signal you pick up when the probe is near the circuit.
Also, the 1.6vpp signal on the source lead is very encouraging! That
is stronger than my rig, so I expect that it is OK.

You just have to figure out at what frequency it is oscillating now.
You might be able to somewhat calibrate your scope by measuring
a "known" frequency, and using the fine tune control that you talked
about to make the cycle fit in the correct number of divisions by
using the formula 1/Frequency.

Then you could get a read from the source of Q14, and determine the
approximate frequency from the 1/Time formula.

I think the problem you see where the signal goes away when you probe
the gate is that the scope and scope probe are loading down the
circuit. The capacitance of a probe, especially a 1:1 probe, is
pretty high, and is likely shunting the signal at that point to
ground.

The source is a relativly low imedance, so the scope probe would have
much less effect there.

Good luck, it's off to work for me.
73 de Randy wb0smx
--- In mmr40owngrp@yahoogroups.com, "veenstra_f" <veenstra_f@...>
wrote:
>
> Hi Randy,
>
> I couldn't resist the temptation of trying it right now and
switched
> the feedback wires. But there didn't seem to be any VFO signal
> between 1 and 5 MHz. on my receiver. Lots of signals this time of
> night even on a small piece of wire, some that even sound a bit
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> a oscillator, but I could rule them all out by turning the power
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> So I checked with the scope on the ground of Q14 and there is only
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> very tiny signal of about (estimated) 3 to 4 mV visible, almost too
> small to visualise on the scope.
> On the timescale division of 2 microsecond and the finetune all the

> way to the left about one and a half wave fit in a square. On
> timescale 5 microsecond and fine tune in the middle about two waves
> fit in. So it seems to be somewhere between 1 and 5 MHz.
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> And when I unhooked the probe something really weird happened. The
> probe slipped, I dropped it and it fell on the table close to the
> PTO . I noticed a huge sine wave on the scope. When I put the probe
> above the PTO coil there is an enormous sine wave visible on the
> scope. It is about 200 mV pp and a perfect sine wave. This only
> happens when the probe is disconnected! And it doesn't matter if
the
> ground clamp is on or off. (this could be due to the fact that all
> sockets and appliances in this house are grounded)
> When I connect it back to the ground of Q14 the sine wave virtually
> disappears. The signal frequency is the same but only the 3-4 mV
> remain.
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> there: around 1.6 V pp ! Wow, so there is a huge signal there, why
> can't I hear it on my receiver?
>
> And why is the signal reduced to almost nothing by J310 instead of
> amplified like it's supposed to?
>
> The voltages on Q14 are now:
> D: 4.95
> S: 2.45
> G: -4.60
>
> Any idea?
>
> 73, Floyd
>

677. Re: Low audio level

Yahoo group: mmr40owngrp
Date: 2009-03-03 13:05:43 UTC
From: veenstra_f
Topic: 665 Message: 677

Yes Randy there is some oscillation now so the turns are now correct, just like you predicted. I don't have much experience using a scope but I get your point starting at a know frequency. I'll let you know how I determined the frequency so you can let me know if I go wrong somewhere.

I set my transceiver at 3 MHz on AM, put the probe near the antenna and squeezed the mike. I set the fine tuning of the scope so that one full sine wave was covering 4 division squares on the scope. Then I put the probe near the PTO and a lot more waves fitted in the same section of the scope. A little less than 5.5 full waves fitted in the same four square section. So it seems the PTO is oscillating at a much higher frequency than it should: just under 5.5 x 3 MHz., that is just under 16.5 MHz.
So I checked again with my receiver and a piece of wire over the PTO. And at around 16.360 MHz. there is a huge S9+30 dB signal. If I move my hands to and from the PTO the frequency of the signal changes.

So the PTO is oscillating but on a completely wrong frequency. This could also explain why I don't seem to have any audio. In the mixer the signals are 10 + 16.5 (-6.5 MHz) and 10 ☐ 16.5 (26.5 MHz.) are made. A negative frequency of -6.5 doesn't make much sense, but it would theoretically be possible to receive on the 26.5 MHz. But the ladder filter (the 4 crystals and capacitors) prevent those signals from passing through.

So why is the PTO on the wrong frequency? For L1 I used the right spacer made of the right material, I should use #32 wire (that is 0.202 milimeters in diameter), I used exactly 0.2 millimetre wire. The amount of turns is also exactly 39. So it's safe to assume that L1 is 100 percent okay.

On L2 both sections have the correct amount of turns and are wound on a T37-2 amidon coil as described. I should have used either #30 wire (0.255 mm) according to the instruction in the kit version or #28 (0.321 mm) according to the original design. I used 0.3 mm wire which is somewhere between #28 and #29. So I think I'm pretty much okay there as well.

Now if I look at the instructions of the kit or at Steven's webpage it doesn't seem to matter how coil L1 is wound. Mine is wound from front to back counter clockwise. But it isn't mentioned anywhere, is it really that irrelevant?

But maybe you have another idea Randy. It least we figured out the PTO frequency now. We're getting there: baby steps . :-)

Floyd

678. Re: Low audio level

Yahoo group: mmr40owngrp
Date: 2009-03-04 00:53:42 UTC
From: wb0smx
Topic: 665 Message: 678

Hello Floyd,
Yes, you are making progress!
Ok, so your PTO is oscillating somewhere around 16 mhz.
I did some experimenting with the circuit in ltspice when I got home
this evening.
I find that if the value of C8, the 330pf frequency determining
capacitor is only
around 3 - 5 pf, instead of 330pf, then the circuit oscillates at around
15 to 16mhz.
I think that is probably pretty close to the stray capacitance in the
circuit, if C8 were
not a factor. So I wonder if maybe you have a bad solder joint
somewhere around C8,
or the L1/C1 junction that it connects to. Maybe even it's ground
connection (that isn't another one that should have gone to ground, but
didn't on the homebrew board, was it?)

I tried to remove my C8 on my working board, to confirm what I'm
thinking, but
chickened out when it became apparent that it was not going to come out
easily.

ltspice also says that the free running frequency without C8 connected
at all is
around 21mhz, but I don't think it knows about stray capacitance.

Your way of measuring the approximate frequency by comparing the ratio
of the 3mhz signal to yours was
right on, I think. Good work!

I really don't think it matters which way L1 is wound, as there is no
mutual coupling between it and L2. But
I should say that that is just my guess, just intuition...
Good Luck...
Randy wb0smx
--- In mmr40owngrp@yahoogroups.com <mailto:mmr40owngrp@yahoogroups.com>
, "veenstra_f" <veenstra_f@...> wrote:
>
> I set my transceiver at 3 MHz on AM, put the probe near the antenna
> and squeezed the mike. I set the fine tuning of the scope so that one
> full sine wave was covering 4 division squares on the scope. Then I
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> is just under 16.5 MHz.

> So I checked again with my receiver and a piece of wire over the PTO.
> And at around 16.360 MHz. there is a huge S9+30 dB signal.
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> So why is the PTO on the wrong frequency?
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> Now if I look at the instructions of the kit or at Steven's webpage
> it doesn't seem to matter how coil L1 is wound. Mine is wound from
> front to back counter clockwise. But it isn't mentioned anywhere, is
> it really that irrelevant?
...
> Floyd
>

679. replacement transistor for 2n4403g and 2n4401g?

Yahoo group: mmr40owngrp
Date: 2009-03-24 17:06:30 UTC
From: sm4vlg
Topic: 679 Message: 679

Hi all !
I try to build the MMR-40 "dead bug" style and I have got the first part "PTO oscillator circuit" done and working.
So now I started with next part and then i run in to some problems I can´t find any of 2n4401g or 2n4403g (in sweden)so I´m looking for any replacement.
Any BC??? that will do the job for me they are common here?

Happy for any suggestions .

Vy 72 SM4VLG /Roy

680. Re: replacement transistor for 2n4403g and 2n4401g?

Yahoo group: mmr40owngrp
Date: 2009-05-04 14:58:47 UTC
From: ki4mmm
Topic: 679 Message: 680

Roy,

I just joined the group and plan to start a dead bug version as well. Did you find any 2n4401/4403's, or equivalents yet? I am no expert, but I have substituted 2n4401 for BC547's for non-USA circuits I have built (i.e., maybe th opposite would work for you). I am not familiar with 2n4403, but a Google search suggest that a BC307 might work. The n23904 NPN and 2n3906 PNP would probably work as well - they can be purchased reasonably from small Ham parts suppliers in the US with very affordable postage to overseas.

Greg
ki4mmm

--- In mmr40owngrp@yahoogroups.com, "sm4vlg" <royen60@...> wrote:
>
> Hi all !
> I try to build the MMR-40 "dead bug" style and I have got the first part "PTO oscillator circuit" done and working.
> So now I started with next part and then i run in to some problems I can´t find any of 2n4401g or 2n4403g (in sweden)so I´m looking for any replacement.
> Any BC??? that will do the job for me they are common here?
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> Happy for any suggestions .
>
> Vy 72 SM4VLG /Roy
>

681. New to group

Yahoo group: mmr40owngrp
Date: 2009-05-30 01:26:57 UTC
From: pgdaulton
Topic: 681 Message: 681

My first post.

I have two MMR transceivers, one on 40 meters and one I modified to
80 meters. I used the values Steve listed in his "simple 75 meter ssb
tranceiver" article on his web site for the 75 meter version.

I just mounted the 40 meter in the KI6DS aluminum case with the digital
dial. I am very pleased with the resulting package.

NIce to find a group to support this fine rig.

Paul Daulton k5wms
Jacksonville , AR

682. Re: [mmr40owngrp] New to group

Yahoo group: mmr40owngrp
Date: 2009-06-04 00:38:32 UTC
From: warren conklin
Topic: 681 Message: 682

Hi Paul. FB on the modification of the ssb for 75m, to the mmr-40. Thats the best way to do it. Ive built the Fairly Simple SSB rig for 75m from the board lay out for that rig on Steves site. It works pretty well, but the tight packaging of the circuit board was smaller thus making the transceiver construction a bit trickier than the mmr 40 layout. The mmr 40 board was well done. I have made some contacts with the 75m rig, conditions kind of tought right now with the band being what it is. I have the mmr 40, but I still have yet to find time to build it.
Nice hearing about some of these projects.

73
Warren.
----- Original Message -----
From: pgdaulton
To: mmr40owngrp@yahoogroups.com
Sent: Friday, May 29, 2009 6:26 PM
Subject: [mmr40owngrp] New to group

My first post.

I have two MMR transceivers, one on 40 meters and one I modified to
80 meters. I used the values Steve listed in his "simple 75 meter ssb
tranceiver" article on his web site for the 75 meter version.

I just mounted the 40 meter in the KI6DS aluminum case with the digital
dial. I am very pleased with the resulting package.

NIce to find a group to support this fine rig.

Paul Daulton k5wms
Jacksonville , AR

683. Re: Problem with RF voltage during transmitter test and alignment

Yahoo group: mmr40owngrp
Date: 2009-06-21 15:45:06 UTC
From: Barbara
Topic: 345 Message: 683

i think i have same problem whats the correct hole? I am getting just .5 of one volt on the gate ans i think i am not using the right "test probe?

--- In mmr40owngrp@yahoogroups.com, "dswain100" <dswain100@...> wrote:
>
> Okay, problem solved. As ususal, it was something really silly. There
> were two open holes for test leads in close proximity to the "D. DET"
> label -- one just below it, and one just to the right. I chose the
> wrong one.
>
> David AB9EI
>
> --- In mmr40owngrp@yahoogroups.com, "dswain100" <dswain100@> wrote:
> >
> > Steve,
> >
> > Thanks for your reply. I was concerned that I would have to replace
> the
> > transformers, and I had no idea how I would be able to remove them
> > without risking damage to the board. I will check the voltages and
> look
> > for soldering errors, misplaced components, etc.
> >
> > Thanks again for your quick response.
> > David
> >
> > --- In mmr40owngrp@yahoogroups.com, "kd1jv" <kd1jv@> wrote:
> > >
> > > parts. I have three GREEN (or maybe aqua blue) slugs marked "42
> IF
> > > 123". Is this a legitimate parts substitution or have I received
> > parts
> > > with the wrong values for the 40-meter kit, and could this be
> causing
> > > the low RF voltage problem?
> > >
> > > The green are a legitimate sub, as the others we originally
> started
> > > with are sold out and have a 6 month back order.
> > >
> > > The problem is likely in one or both of the driver stages. Check
> the
> > > voltages and look for soldering errors, miss placed componets,
> ect.
> > >

> > > Steve KD1JV
> > >
> >
>

684. No Transmit

Yahoo group: mmr40owngrp
Date: 2009-06-21 17:50:39 UTC
From: gluthor2001
Topic: 684 Message: 684

Hey everyone I built the latest version mmr-40 from Hendricks kits and I know this kit was way over my head. It powers up and i have noise on receive but nothing on transmit. I dont have a scope or any fancy test equipment. I used my antenna analyser with a small wire for an antenna and can tune the signal on the mmr-40. I dont think im even getting a driver signal output. Any one willing to take a look at it and see where i went wrong? I havent even tried any of the tune up procedures cause im not sure what im doing. Any suggestions on things to check. I know this is kind of a vague description but any help would be appreciated. thanks

Gregg kb9yqu

685. Re: Problem with RF voltage during transmitter test and alignment

Yahoo group: mmr40owngrp
Date: 2009-06-22 00:21:00 UTC
From: wb0smx
Topic: 345 Message: 685

--- In mmr40owngrp@yahoogroups.com, "Barbara" <barbara_ann22@...> wrote:
>
> i think i have same problem whats the correct hole? I am getting just .5 of one volt on the gate ans i think i am not using the right "test probe?

Hi Barbara. The hole just to the right of the "T" in the "D.DET" label is the correct hole for the diode detector probe.
Good luck... Randy WB0SMX

686. Re: No Transmit

Yahoo group: mmr40owngrp
Date: 2009-06-22 00:34:17 UTC
From: wb0smx
Topic: 684 Message: 686

Hi Gregg. What step are you at in the assembly manual? There is a built in RF-probe on the board, which you can hook a Digital multimeter (or even a "real" analog meter, if you have one...). One of the tests is to check for and peak the RF voltage to the input of the final amplifier, before the final amplifier (Q10) is installed.

It sounds like your receiver is generally working, as you can receive a signal from your antenna analyzer. That also means that a good part of the transmitter is also working.

I would suggest going through the steps in the "Testing and TuneUp" section of the manual, until you reach a point that you get stuck.

Good luck... Randy WB0SMX

--- In mmr40owngrp@yahoogroups.com, "gluthor2001" <gluthor2001@...> wrote:
>
> Hey everyone I built the latest version mmr-40 from Hendricks kits and I know this kit was way over my head. It powers up and i have noise on receive but nothing on transmit. I dont have a scope or any fancy test equipment. I used my antenna analyser with a small wire for an antenna and can tune the signal on the mmr-40. I dont think im even getting a driver signal output. Any one willing to take a look at it and see where i went wrong? I havent even tried any of the tune up procedures cause im not sure what im doing. Any suggestions on things to check. I know this is kind of a vague description but any help would be appreciated. thanks
>
> Gregg kb9yqu
>

687. Re: [mmr40owngrp] Re: Problem with RF voltage during transmitter test and alignment

Yahoo group: mmr40owngrp
Date: 2009-06-22 01:10:22 UTC
From: bam
Topic: 345 Message: 687

ok. . .I had that one in the first place. . .still get just half a watt at the gate. Bummer.

--- On Sun, 6/21/09, wb0smx <rdpecken1@...> wrote:

From: wb0smx <rdpecken1@...>
Subject: [mmr40owngrp] Re: Problem with RF voltage during transmitter test and alignment
To: mmr40owngrp@yahoogroups.com
Date: Sunday, June 21, 2009, 8:21 PM

--- In mmr40owngrp@ yahoogroups. com, "Barbara" <barbara_ann22@ ...> wrote:
>
> i think i have same problem whats the correct hole? I am getting just .5 of one volt on the gate ans i think i am not using the right "test probe?

Hi Barbara. The hole just to the right of the "T" in the "D.DET" label is the correct hole for the diode detector probe.
Good luck... Randy WB0SMX

688. Re: [mmr40owngrp] Re: No Transmit

Yahoo group: mmr40owngrp
Date: 2009-06-22 12:09:27 UTC
From: Gregg
Topic: 684 Message: 688

Randy
  thanks for the reply. that is my plan to go over the unit again and look for misplaced parts and or bad solder joints. then try the testing procedures and hope i find something.

Thanks

Gregg kb9yqu

Music lovers: Earn FREE MP3s for reviewing hot, new music.

http://www.quickinfo247.com/8387830/TF

--- On Sun, 6/21/09, wb0smx <rdpecken1@...> wrote:

From: wb0smx <rdpecken1@...>
Subject: [mmr40owngrp] Re: No Transmit
To: mmr40owngrp@yahoogroups.com
Date: Sunday, June 21, 2009, 7:34 PM

Hi Gregg. What step are you at in the assembly manual? There is a built in RF-probe on the board, which you can hook a Digital multimeter (or even a "real" analog meter, if you have one...). One of the tests is to check for and peak the RF voltage to the input of the final amplifier, before the final amplifier (Q10) is installed.

It sounds like your receiver is generally working, as you can receive a signal from your antenna analyzer. That also means that a good part of the transmitter is also working.

I would suggest going through the steps in the "Testing and TuneUp" section of the manual, until you reach a point that you get stuck.

Good luck... Randy WB0SMX

--- In mmr40owngrp@ yahoogroups. com, "gluthor2001" <gluthor2001@ ...> wrote:

>

> Hey everyone I built the latest version mmr-40 from Hendricks kits and I know this kit was way over my head. It powers up and i have noise on receive but nothing on transmit. I dont have a scope or any fancy test equipment. I used my antenna analyser with a small wire for an antenna and can tune the signal on the mmr-40. I dont think im even getting a driver signal output. Any one willing to take a look at it and see where i went wrong? I havent even tried any of the tune up procedures cause im not sure what im doing. Any suggestions on things to check. I know this is kind of a vague description but any help would be appreciated. thanks

>

> Gregg kb9yqu

>

689. no transmit

Yahoo group: mmr40owngrp
Date: 2009-08-17 20:05:39 UTC
From: stealth49.geo
Topic: 689 Message: 689

Continuation of old post, had a working radio until it tried to put it in the new metal case. Trying to get the two jacks wired correctly, I must have shorted something. (since figured out both jacks are wired the same and only one can be used at a time-I think).

Receiver still works well. When mic or key is pushed the Speaker clicks silent. The is no out put (e.g. on a meter and dummy load).
I have checked all the voltages listed in the manual, but see nothing not working. Changed out the final and still nothing.

It appears to me that the issue is the T/R switching. Suggests on what to look at???

Thanks for any help.

Tim
W1WCI

690. Re: no transmit

Yahoo group: mmr40owngrp
Date: 2009-08-18 00:00:59 UTC
From: wb0smx
Topic: 689 Message: 690

Hi Tim.
Just for clarification, when you checked the voltages, did you check them in both Receive and Transmit modes? The voltage chart on page 17 of the Rev "B" manual shows how they should change.

Have you tried transmitting in CW by using a mono plug in the mic jack, and shorting the tip to the sleeve? I would expect a sidetone from the speaker with key down in that mode, with the level controlled by variable resistor V5. The actual tone going to the transmit section is controlled by variable resistor V4. Those tests may give you some clues as to where the problem is.
Good luck & 73
Randy WB0SMX

--- In mmr40owngrp@yahoogroups.com, "stealth49.geo" <KB1GFV@...> wrote:
>
> I have checked all the voltages listed in the manual, but see nothing not working. Changed out the final and still nothing.
>
> It appears to me that the issue is the T/R switching. Suggests on what to look at???

691. Re: no transmit

Yahoo group: mmr40owngrp
Date: 2009-08-18 02:15:24 UTC
From: stealth49.geo
Topic: 689 Message: 691

I believe I have check both S&R and I have played with V4...no transmit or side tone. I will double check again later this week. No tone with the mono plug, will double check V5.

My impression is that all was well until I started to check contact points around the two jacks, mic and key.

Thanks for your patience.

Tim
W1WCI

692. Re: no transmit

Yahoo group: mmr40owngrp
Date: 2009-08-19 00:46:05 UTC
From: wb0smx
Topic: 689 Message: 692

After you re-check, I'll be glad to make some comparison measurements on my rig for you. I know turnaround will be a little slow, though, as I am up building my cabin for about 4-5 days every other weekend. But I'll help where I can.
73 de Randy WB0SMX

--- In mmr40owngrp@yahoogroups.com, "stealth49.geo" <KB1GFV@...> wrote:
>
> I believe I have check both S&R and I have played with V4...no transmit or side tone. I will double check again later this week. No tone with the mono plug, will double check V5.
>
> My impression is that all was well until I started to check contact points around the two jacks, mic and key.
>
> Thanks for your patience.
>
> Tim
> W1WCI
>

693. Membership

Yahoo group: mmr40owngrp
Date: 2009-10-15 11:40:25 UTC
From: chang2chi
Topic: 693 Message: 693

I am changing my log in name to my call sign. I have tried to join under that name (KJ4FAA) but have not been approved yet. When I am approved under my new log in name I intend to close this membership. Please approve me under the log in name KJ4FAA@.... Thank you.

Carl

694. Midwest Homebrewers & QRP Group

Yahoo group: mmr40owngrp
Date: 2009-10-29 13:44:53 UTC
From: darpiatt
Topic: 694 Message: 694

It is my pleasure to announce that the Midwest Homebrewers & QRP group web site has a new home.
Thanks to the great help from Dean Davis (N7XG) of Alpinesoft.com it is all set up and running (And up to date).
Please visit the new site at --> http://www.hbqrp.org <http://www.hbqrp.org/>

Suggestions and ideas are welcome.

Remember next get together is Nov14th which happens to coincide with another Polar Bear outing so a few of us should be going to Ashland park and setting up to operate for a while.

Visitors are welcome and encouraged.
And - Thanks Dean...

73's

Darwin (Dar) Piatt - W9HZC
Midwest HomeBrewer's and QRP Group
http://www.qsl.net/hbqrp <http://www.qsl.net/hbqrp>

695. Re: [mmr40owngrp] Midwest Homebrewers & QRP Group

Yahoo group: mmr40owngrp
Date: 2009-10-29 14:15:39 UTC
From: CHAR DAILEY
Topic: 694 Message: 695

What'snwith this 73's Dont you mean 73 or 73s. 's means property of.....

--- On Thu, 10/29/09, darpiatt <darpiatt@...> wrote:

From: darpiatt <darpiatt@...>
Subject: [mmr40owngrp] Midwest Homebrewers & QRP Group
To: mmr40owngrp@yahoogroups.com
Date: Thursday, October 29, 2009, 8:44 AM

It is my pleasure to announce that the Midwest Homebrewers & QRP group web site has a new home.
Thanks to the great help from Dean Davis (N7XG) of Alpinesoft.com it is all set up and running (And up to date).
Please visit the new site at --> http://www.hbqrp. org <http://www.hbqrp. org/>

Suggestions and ideas are welcome.

Remember next get together is Nov14th which happens to coincide with another Polar Bear outing so a few of us should be going to Ashland park and setting up to operate for a while.

Visitors are welcome and encouraged.
And - Thanks Dean...

73's

Darwin (Dar) Piatt - W9HZC
Midwest HomeBrewer's and QRP Group
http://www.qsl. net/hbqrp <http://www.qsl. net/hbqrp>

696. Invitation from FRENCHYX2

Yahoo group: mmr40owngrp
Date: 2009-11-18 23:00:54 UTC
From: FRENCHYX2
Topic: 696 Message: 696

(http://strongmail.onlinebootycall.com:80/track?type=click&mailingid=contest_ref_html_5&messageid=0000&databaseid=1234&serial=2023948288&emailid=mmr40owngrp@yahoogroups.com&userid=1238&extra=&&&http://www.onlinebootycall.com/r.php?ref=4078671)
Username:
FRENCHYX2
Booty Calls: 0
Member Since: 11/18/2009

Invitation From FRENCHYX2

Your friend FRENCHYX2 (http://strongmail.onlinebootycall.com:80/track?type=click&mailingid=contest_ref_html_5&messageid=0000&databaseid=1234&serial=2023948288&emailid=mmr40owngrp@yahoogroups.com&userid=1238&extra=&&&http://www.obcdate.com/r.php?ref=4078671) wants you to join them at OBC Date, the hottest dating site for singles who enjoy being single. Millions have already registered and thousands join daily.

Registration is Free and only takes a minute.

Click your friend's link below to join now!

http://www.obcdate.com/r.php?ref=4078671 (http://strongmail.onlinebootycall.com:80/track?type=click&mailingid=contest_ref_html_5&messageid=0000&databaseid=1234&serial=2023948288&emailid=mmr40owngrp@yahoogroups.com&userid=1238&extra=&&&http://www.obcdate.com/r.php?ref=4078671)
(If you can't click the link copy/paste into your browser address bar)

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Mobeze, Inc. P.O. Box 880556, San Diego, CA 92168

OBC Date,
Finding the pieces, without the puzzle

697. test message. Who's admin?

Yahoo group: mmr40owngrp
Date: 2009-12-09 18:11:15 UTC
From: n1rx
Topic: 697 Message: 697

Hello to the group.

I noticed a posting on the qrp-l.org mailing list today. A member there has been trying to subscribe to this group, with no response. He has an MMR-40 he wants to build this winter, and was wondering if this group is still active.

If anyone still admins this group (i.e. approves requests to join) could you please let me know?

Thanks,
Bruce N1RX

698. Welcome

Yahoo group: mmr40owngrp
Date: 2010-05-13 13:31:23 UTC
From: Dean
Topic: 698 Message: 698

welcome

699. (no subject)

Yahoo group: mmr40owngrp
Date: 2010-06-14 19:05:52 UTC
From: JWells6391@aol.com
Topic: 699 Message: 699

www.fug3.yourhealthcare-c.com

700. (no subject)

Yahoo group: mmr40owngrp
Date: 2010-06-15 02:25:31 UTC
From: JWells6391@aol.com
Topic: 700 Message: 700

www.ira3.yourhealthcare-c.com

701. (no subject)

Yahoo group: mmr40owngrp
Date: 2010-06-17 21:36:54 UTC
From: JWells6391@aol.com
Topic: 701 Message: 701

www.dnr2.usdrug-co.com

702. (no subject)

Yahoo group: mmr40owngrp
Date: 2010-06-19 07:08:27 UTC
From: JWells6391@aol.com
Topic: 702 Message: 702

www.vbf4.usadrugs-c.com

703. Anyone intersted in my MMR40?

Yahoo group: mmr40owngrp
Date: 2010-06-24 20:14:31 UTC
From: k4bri
Topic: 703 Message: 703

Howdy to all - I just purchased a nice QRP all band rig and I would like to see if anyone would have any interest in my MMR40 - It it is one with the black case and I put in the digital display on the top of the case - it was a great rig to build and I had alot of fun with it. Before I go to other avenues to sell it, I thought I would ask here.

73 and melt solder :)

Brian, K4BRI

704. finally getting around to building this kit ...

Yahoo group: mmr40owngrp
Date: 2011-03-05 04:47:41 UTC
From: charles
Topic: 704 Message: 704

... and it went together really easily. started wednesday evening and finished it this event. i haven't finished tuning it up because i didn't have time ... i'll get to it tomorrow. it powered up properly and the frequency of the pto came out spot on. i didn't count, i just filled the space between the holes. i put an antenna on it and heard clear ssb signals (but lots of bci - it being late in the afternoon and 40 meters is very long.) so far, so good. i have a small oscilloscope so getting the transmitter going tomorrow should be fun. my goal is to check into my weekly net on sunday morning with this rig! I wanted everyone to know that there IS ACTIVITY in this usersgroup. 73 de charles ai4ot

705. Re: finally getting around to building this kit ...

Yahoo group: mmr40owngrp
Date: 2011-03-05 17:55:03 UTC
From: wa5pse
Topic: 704 Message: 705

Hi Charles,

WOW...what a coincidence seeing your post...Like you, I was wondering if anyone was still around here!

I've been antsy all week about getting my MMR40 out and finishing up the couple of last couple of details.

Last weekend, I worked a few contacts with my IC-746PRO turned all the way down to about 7 watts...which is about as far down as it would go.

So, yesterday, after work, I got the MMR40 out and discovered what it was that I'd left unresolved a year or so back.
I was going to forego the built in speaker in favor of a jack for a headset...

I have operated it on CW with good results...and not such good results on LSB

Have made custom engraved front and rear panels that look kinda nice, if I say so myself...

I'll get pics posted as soon as I get the speaker jack in...

72, Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "charles" <ai4ot@...> wrote:
>
> ... and it went together really easily. started wednesday evening and finished it this event. i haven't finished tuning it up because i didn't have time ... i'll get to it tomorrow. it powered up properly and the frequency of the pto came out spot on. i didn't count, i just filled the space between the holes. i put an antenna on it and heard clear ssb signals (but lots of bci - it being late in the afternoon and 40 meters is very long.) so far, so good. i have a small oscilloscope so getting the transmitter going tomorrow should be fun. my goal is to check into my weekly net on sunday morning with this rig! I wanted everyone to know that there IS ACTIVITY in this usersgroup. 73 de charles ai4ot
>

706. Re: finally getting around to building this kit ...

Yahoo group: mmr40owngrp
Date: 2011-03-06 19:58:03 UTC
From: wb0smx
Topic: 704 Message: 706

Hi Charles.
Congratulations on the good results so far. I built mine a year or so ago. It's actually a pretty good QRP radio. I used it for my QRP Battery Powered contacts for Field Day last year. As always, a contest adds about 20db to your QRP signal!
Anyway, yes, I still monitor here, but unfortunately, I think the moderator has abandoned the group, so I don't think new members can join. I haven't been able to contact the moderator.

Good luck in your tune up, and 73...
Randy WB0SMX

--- In mmr40owngrp@yahoogroups.com, "charles" <ai4ot@...> wrote:
>
> ... and it went together really easily. started wednesday evening and finished it this event. i haven't finished tuning it up because i didn't have time ... i'll get to it tomorrow. it powered up properly and the frequency of the pto came out spot on. i didn't count, i just filled the space between the holes. i put an antenna on it and heard clear ssb signals (but lots of bci - it being late in the afternoon and 40 meters is very long.) so far, so good. i have a small oscilloscope so getting the transmitter going tomorrow should be fun. my goal is to check into my weekly net on sunday morning with this rig! I wanted everyone to know that there IS ACTIVITY in this usersgroup. 73 de charles ai4ot
>

707. Re: finally getting around to building this kit ...

Yahoo group: mmr40owngrp
Date: 2011-03-06 20:29:32 UTC
From: wa5pse
Topic: 704 Message: 707

Randy,

Do you think there'd be enough interest in a new group to bother starting one up?

I'd be happy to co-moderate with someone.

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "wb0smx" <rdpecken1@...> wrote:
>
> Hi Charles.
> Congratulations on the good results so far. I built mine a year or so ago. It's actually a pretty good QRP radio. I used it for my QRP Battery Powered contacts for Field Day last year. As always, a contest adds about 20db to your QRP signal!
> Anyway, yes, I still monitor here, but unfortunately, I think the moderator has abandoned the group, so I don't think new members can join. I haven't been able to contact the moderator.
>
> Good luck in your tune up, and 73...
> Randy WB0SMX
>
> --- In mmr40owngrp@yahoogroups.com, "charles" <ai4ot@> wrote:
> >
> > ... and it went together really easily. started wednesday evening and finished it this event. i haven't finished tuning it up because i didn't have time ... i'll get to it tomorrow. it powered up properly and the frequency of the pto came out spot on. i didn't count, i just filled the space between the holes. i put an antenna on it and heard clear ssb signals (but lots of bci - it being late in the afternoon and 40 meters is very long.) so far, so good. i have a small oscilloscope so getting the transmitter going tomorrow should be fun. my goal is to check into my weekly net on sunday morning with this rig! I wanted everyone to know that there IS ACTIVITY in this usersgroup. 73 de charles ai4ot
> >
>

708. (no subject)

Yahoo group: mmr40owngrp
Date: 2011-03-07 02:09:58 UTC
From: Phil Greer
Topic: 708 Message: 708

I just read the last message and I'm hoping that the group does not fold up. I have just started getting all the parts together and hope that next winter I can get started on my mmr40 and I'm sure that I will have a lot of questions and need some help, so as I said I hope the group stays together.

73 Phil WB7RXY

709. Group Activity

Yahoo group: mmr40owngrp
Date: 2011-03-07 14:31:22 UTC
From: n1rx
Topic: 708 Message: 709

I think there are still quite a few of us monitoring the group, Phil. I still get daily digests, and intend to continue to do so. The problem is that the moderator and group owner appears to have abandonded the group, so there is no one who can approve new membership requests.

Bruce, N1RX

--- In mmr40owngrp@yahoogroups.com, "Phil Greer" <wannabe@...> wrote:
>
> I just read the last message and I'm hoping that the group does not fold up. I have just started getting all the parts together and hope that next winter I can get started on my mmr40 and I'm sure that I will have a lot of questions and need some help, so as I said I hope the group stays together.
>
> 73 Phil WB7RXY
>

710. re: [mmr40owngrp] Group Activity

Yahoo group: mmr40owngrp
Date: 2011-03-07 14:59:02 UTC
From: Dean Davis
Topic: 708 Message: 710

Phil,

I have sent a private email to the group owner asking if I can become a moderator to help out a bit. Perhaps we can get this back on track.

Normal
0

false
false
false

MicrosoftInternetExplorer4

Normal
0

false
false
false

MicrosoftInternetExplorer4

D2
Dean Davis (N7XG)
Alpine Software
www.alpinesoft.com

From: "n1rx" <bruce.beford@...>
Sent: Monday, March 07, 2011 6:38 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Group Activity

I think there are still quite a few of us monitoring the group, Phil. I still get daily digests, and intend to continue to do so. The problem is that the moderator and group owner appears to have abandonded the group, so there is no one who can approve new membership requests.

Bruce, N1RX

--- In mmr40owngrp@yahoogroups.com, "Phil Greer" <wannabe@...> wrote:
>
> I just read the last message and I'm hoping that the group does not fold up. I have just started getting all the parts together and hope that next winter I can get started on my

mmr40 and I'm sure that I will have a lot of questions and need some help, so as I said I hope the group stays together.
>
> 73 Phil WB7RXY
>

711. RE: [mmr40owngrp] Group Activity

Yahoo group: mmr40owngrp
Date: 2011-03-07 15:03:56 UTC
From: Bernie Hunt
Topic: 708 Message: 711

I'm here, sitting quietly in the back.

Bernie

From: mmr40owngrp@yahoogroups.com [mailto:mmr40owngrp@yahoogroups.com]
On Behalf Of n1rx
Sent: Monday, March 07, 2011 9:31 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Group Activity

I think there are still quite a few of us monitoring the group, Phil. I
still get daily digests, and intend to continue to do so. The problem is
that the moderator and group owner appears to have abandonded the group,
so there is no one who can approve new membership requests.

Bruce, N1RX

--- In mmr40owngrp@yahoogroups.com
<mailto:mmr40owngrp%40yahoogroups.com> , "Phil Greer" <wannabe@...>
wrote:
>
> I just read the last message and I'm hoping that the group does not
fold up. I have just started getting all the parts together and hope
that next winter I can get started on my mmr40 and I'm sure that I will
have a lot of questions and need some help, so as I said I hope the
group stays together.
>
> 73 Phil WB7RXY
>

712. front and rear panel labels

Yahoo group: mmr40owngrp
Date: 2011-03-07 15:50:50 UTC
From: charles
Topic: 712 Message: 712

i'm not having any luck getting panel templetes that are "scale size" for the black plastic case. i know what the manual says about opening a file in paint but the trouble is i don't have the "file" and i think that it was on the qrpkits website way-back-when and now they only have the files for the new version with the metal case. anyone have a digital file they can email me which will open up and be the right size. other than that i'm going to eye-ball it and you can imagine what that will look like ... hi hi .. thanks 73 de ai4ot charles (p.s. I posted a little 14 second video on youtube of the receiver working. search youtube using my call 72/73)

713. Re: Group Activity

Yahoo group: mmr40owngrp
Date: 2011-03-07 20:06:06 UTC
From: n1rx
Topic: 708 Message: 713

--- In mmr40owngrp@yahoogroups.com, "Dean Davis" <dean@...> wrote:
>
> Phil,
>
> I have sent a private email to the group owner asking if I can become a moderator to help out a bit. Perhaps we can get this back on track.
>

OK, Dean.

Hopefully, you have a different email adress for Tom than the one he set up this group with. (His status on the member list shows as email bouncing.)

73,
Bruce, N1RX

714. New file uploaded to mmr40owngrp

Yahoo group: mmr40owngrp
Date: 2011-03-07 20:11:20 UTC
From: mmr40owngrp@yahoogroups.com
Topic: 19 Message: 714

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the mmr40owngrp
group.

File : /PANELDRILL.bmp
Uploaded by : n1rx <bruce.beford@...>
Description : Original Panel drilling template

You can access this file at the URL:
http://groups.yahoo.com/group/mmr40owngrp/files/PANELDRILL.bmp

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

n1rx <bruce.beford@...>

715. Re: front and rear panel labels

Yahoo group: mmr40owngrp
Date: 2011-03-07 20:12:49 UTC
From: n1rx
Topic: 712 Message: 715

--- In mmr40owngrp@yahoogroups.com, "charles" <ai4ot@...> wrote:
>
> i'm not having any luck getting panel templetes that are "scale size" for the black plastic case. i know what the manual says about opening a file in paint but the trouble is i don't have the "file" and i think that it was on the qrpkits website way-back-when and now they only have the files for the new version with the metal case. anyone have a digital file they can email me which will open up and be the right size. other than that i'm going to eye-ball it and you can imagine what that will look like ... hi hi .. thanks 73 de ai4ot charles (p.s. I posted a little 14 second video on youtube of the receiver working. search youtube using my call 72/73)
>

Your wish has been granted. I have uploaded the original BMP file to the Files section of the group.
73, Bruce, N1RX

716. re: [mmr40owngrp] Re: Group Activity

Yahoo group: mmr40owngrp
Date: 2011-03-07 21:08:57 UTC
From: Dean Davis
Topic: 708 Message: 716

I used his email address on QRZ

Normal
0

false
false
false

MicrosoftInternetExplorer4

Normal
0

false
false
false

MicrosoftInternetExplorer4

D2
Dean Davis (N7XG)
Alpine Software
www.alpinesoft.com

From: "n1rx" <bruce.beford@...>
Sent: Monday, March 07, 2011 12:13 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: Group Activity

--- In mmr40owngrp@yahoogroups.com, "Dean Davis" <dean@...> wrote:
>
> Phil,
>
> I have sent a private email to the group owner asking if I can become a moderator to help out a bit. Perhaps we can get this back on track.
>

OK, Dean.

Hopefully, you have a different email adress for Tom than the one he set up this group with. (His status on the member list shows as email bouncing.)

73,
Bruce, N1RX

717. Re: Group Activity

Yahoo group: mmr40owngrp
Date: 2011-03-07 21:40:57 UTC
From: n1rx
Topic: 708 Message: 717

--- In mmr40owngrp@yahoogroups.com, "Dean Davis" <dean@...> wrote:
>
> I used his email address on QRZ
>
That's interesting. I don't see an email address listed on QRZ:
http://www.qrz.com/db/KF4YYD

In any event, I hope you get somehwere with it.
GL,
Bruce N1RX

718. re: [mmr40owngrp] Re: Group Activity

Yahoo group: mmr40owngrp
Date: 2011-03-07 22:21:31 UTC
From: Dean Davis
Topic: 708 Message: 718

Bruce,

If push came to shove we could create a new group.

Normal
0

false
false
false

MicrosoftInternetExplorer4

Normal
0

false
false
false

MicrosoftInternetExplorer4

D2
Dean Davis (N7XG)
Alpine Software
www.alpinesoft.com

From: "n1rx" <bruce.beford@...>
Sent: Monday, March 07, 2011 1:48 PM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Re: Group Activity

--- In mmr40owngrp@yahoogroups.com, "Dean Davis" <dean@...> wrote:
>
> I used his email address on QRZ
>
That's interesting. I don't see an email address listed on QRZ:
http://www.qrz.com/db/KF4YYD

In any event, I hope you get somehwere with it.
GL,
Bruce N1RX

719. Re: front and rear panel labels

Yahoo group: mmr40owngrp
Date: 2011-03-08 00:32:49 UTC
From: charles
Topic: 712 Message: 719

thanks! 73 de charles ai4ot

--- In mmr40owngrp@yahoogroups.com, "n1rx" <bruce.beford@...> wrote:
>
>
>
> --- In mmr40owngrp@yahoogroups.com, "charles" <ai4ot@> wrote:
> >
> > i'm not having any luck getting panel templetes that are "scale size" for the black plastic case. i know what the manual says about opening a file in paint but the trouble is i don't have the "file" and i think that it was on the qrpkits website way-back-when and now they only have the files for the new version with the metal case. anyone have a digital file they can email me which will open up and be the right size. other than that i'm going to eye-ball it and you can imagine what that will look like ... hi hi .. thanks 73 de ai4ot charles (p.s. I posted a little 14 second video on youtube of the receiver working. search youtube using my call 72/73)
> >
>
> Your wish has been granted. I have uploaded the original BMP file to the Files section of the group.
> 73, Bruce, N1RX
>

720. Re: Group Activity

Yahoo group: mmr40owngrp
Date: 2011-03-08 17:12:05 UTC
From: wa5pse
Topic: 708 Message: 720

I asked this in my reply to Randy who's 'finally getting around to building, etc'...

Maybe I should have posted separately....

Any interest out there in starting a new, MODERATED, group site for the MMR40 enthusiasts???

Mike, WA5PSE

--- In mmr40owngrp@yahoogroups.com, "n1rx" <bruce.beford@...> wrote:
>
> I think there are still quite a few of us monitoring the group, Phil. I still get daily digests, and intend to continue to do so. The problem is that the moderator and group owner appears to have abandonded the group, so there is no one who can approve new membership requests.
>
> Bruce, N1RX
>
> --- In mmr40owngrp@yahoogroups.com, "Phil Greer" <wannabe@> wrote:
> >
> > I just read the last message and I'm hoping that the group does not fold up. I have just started getting all the parts together and hope that next winter I can get started on my mmr40 and I'm sure that I will have a lot of questions and need some help, so as I said I hope the group stays together.
> >
> > 73 Phil WB7RXY
> >
>

721. Start a new group site question...

Yahoo group: mmr40owngrp
Date: 2011-03-08 17:15:04 UTC
From: wa5pse
Topic: 721 Message: 721

Here we go in hopes of catching your attention a little better....

How many are interested in starting a new site and would like to move there??

I'm willing and will also set up another moderrator just so you're covered in case something happens to one of the moderators.

Mike, WA5PSE

722. re: [mmr40owngrp] Start a new group site question...

Yahoo group: mmr40owngrp
Date: 2011-03-08 17:42:33 UTC
From: Dean Davis
Topic: 721 Message: 722

Mike,

On behalf of QRP Kits I was thinking of doing the same thing. I have set up groups for some of his other kits as well.

Normal
0

false
false
false

MicrosoftInternetExplorer4

Normal
0

false
false
false

MicrosoftInternetExplorer4

D2
Dean Davis (N7XG)
Alpine Software
www.alpinesoft.com

From: "wa5pse" <k9qb@...>
Sent: Tuesday, March 08, 2011 9:21 AM
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Start a new group site question...

Here we go in hopes of catching your attention a little better....

How many are interested in starting a new site and would like to move there??

I'm willing and will also set up another moderrator just so you're covered in case something happens to one of the moderators.

Mike, WA5PSE

723. Re: Group Activity

Yahoo group: mmr40owngrp
Date: 2011-03-09 01:06:01 UTC
From: wb0smx
Topic: 708 Message: 723

Sorry I didn't reply earlier, Mike.
I would move to another group and follow there. It wasn't me who was 'finally getting around to building', I've been finished for a year or so. But I'd be glad to help out anyone else who is still working on it.
Randy WB0SMX

--- In mmr40owngrp@yahoogroups.com, "wa5pse" <k9qb@...> wrote:
>
> I asked this in my reply to Randy who's 'finally getting around to building, etc'...
>
> Maybe I should have posted separately....
>
> Any interest out there in starting a new, MODERATED, group site for the MMR40 enthusiasts???
>
> Mike, WA5PSE

724. Re: Start a new group site question...

Yahoo group: mmr40owngrp
Date: 2011-03-09 14:52:56 UTC
From: Bill Noyce
Topic: 721 Message: 724

I'd be willing to move to a new group if necessary. I finished my MMR-40 kit (in the original plastic case) a couple of years ago, but am in the midst of homebrewing an 80m version.
-- Bill, AB1AV

725. finished (with only labels to make)

Yahoo group: mmr40owngrp
Date: 2011-03-10 02:13:30 UTC
From: charles
Topic: 725 Message: 725

i finished the radio and found a mike to use. (photos are posted) it works and transmits my voice to my nearby radio but i haven't had an on-air report yet (no QSOs). i measured the placement of the cut-outs but the slide switch was difficult because of my lack of rat-tail file skills. a quick coat of yellow spray paint works wonders! i really like the sound of the receiver. now to find some time to operate. 73 de charles ai4ot

726. First QSO

Yahoo group: mmr40owngrp
Date: 2011-03-14 19:13:45 UTC
From: charles
Topic: 726 Message: 726

today at lunch time i heard a couple of guys in new york in a ssb qso so i decided to break in with my call sign. though my signal was weak, one of the stations made out almost all of my call sign the first time, and when I came back to him, he got all of it ... the other station said i was too low in the noise. but that was the FIRST official qso with the mmr-40. in fact, that was the first voice qso i have ever had with a rig i've built. all the other rigs i've built have been CW so this was a DOUBLE FIRST!! 73 de charles ai4ot

727. Re: [mmr40owngrp] First QSO

Yahoo group: mmr40owngrp
Date: 2011-03-15 05:38:44 UTC
From: Paul Daulton
Topic: 726 Message: 727
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

728. Virginia QSO party with MMR-40

Yahoo group: mmr40owngrp
Date: 2011-03-21 17:38:29 UTC
From: charles
Topic: 728 Message: 728

When i mentioned that i was running 3 watts from a homebrew rig i got a number of heart warming comments. i didn't mention qrp for every contact but when i did the remarks were, "wow" and "good signal." That's all i needed to hear to know that i don't need to change a thing (that's quoting one of the contacts). (i wasn't really sure about the, pa bias, mic gain or the rig's alignment, but i have no questions now; it works just fine!) no great dx (just michigan and rhode island) but some of the virginia contacts were from about five hundred miles away (wise county is as far west as michigan is from arlington). i only worked the contest for a couple of hours on sunday but i made about 20 ssb contacts during that time. pretty nice! 73 de charles ai4ot

729. wpx contest

Yahoo group: mmr40owngrp
Date: 2011-03-27 21:47:44 UTC
From: charles
Topic: 729 Message: 729

serbia, poland czech republic last night with the mmr-40 and checked into my weekly net this morning! net control repeated for all to hear that i was homebrew qrp! (NOT QUITE ON TOPIC but yesterday at the hamfest near baltimore in timmonium maryland i met the designer and builder of the tak-40 which actually won the contest that spawned kd1jv's mmr-40 rig. i've posted a picture of jim veitch and his rigs including the 50w amplifier and the tak-40. all of the rigs were qst cover stories.) 73 de charles ai4ot

730. New group formed for the MMR40

Yahoo group: mmr40owngrp
Date: 2011-04-07 17:10:25 UTC
From: Dean
Topic: 730 Message: 730

Hi,

I have just created a new group for the MMR40 users.

Please join:

mmr40@yahoogroups.com

I will try and migrate all of the content off the older dormant group.

Dean, N7XG

731. Re: [mmr40owngrp] New group formed for the MMR40

Yahoo group: mmr40owngrp
Date: 2011-04-07 18:29:59 UTC
From: Doug Jones
Topic: 730 Message: 731

How does changing to a new group on Yahoo bring a group out of
dormancy? Just curious.

Doug
N6LMX

On 4/7/2011 10:10 AM, Dean wrote:
>
> Hi,
>
> I have just created a new group for the MMR40 users.
>
> Please join:
>
> mmr40@yahoogroups.com <mailto:mmr40%40yahoogroups.com>
>
> I will try and migrate all of the content off the older dormant group.
>
> Dean, N7XG
>
>

732. Re: [mmr40owngrp] New group formed for the MMR40

Yahoo group: mmr40owngrp
Date: 2011-04-07 18:41:42 UTC
From: Dean Davis
Topic: 730 Message: 732

Doug,

The list owner disapperaed.

Normal
0

false
false
false

MicrosoftInternetExplorer4

Normal
0

false
false
false

MicrosoftInternetExplorer4

D2
Dean Davis (N7XG)
Alpine Software
www.alpinesoft.com

From: "Doug Jones" <limax@...>
Sent: Thursday, April 07, 2011 11:37 AM
To: mmr40owngrp@yahoogroups.com
Subject: Re: [mmr40owngrp] New group formed for the MMR40

How does changing to a new group on Yahoo bring a group out of
dormancy? Just curious.

Doug
N6LMX

On 4/7/2011 10:10 AM, Dean wrote:

Hi,

I have just created a new group for the MMR40 users.

Please join:

mmr40@yahoogroups.com

I will try and migrate all of the content off the older dormant group.

Dean, N7XG

733. Re: [mmr40owngrp] New group formed for the MMR40

Yahoo group: mmr40owngrp
Date: 2011-04-07 18:47:03 UTC
From: Doug Jones
Topic: 730 Message: 733

Okay, that makes sense

Doug

On 4/7/2011 11:41 AM, Dean Davis wrote:
>
> Doug,
>
> The list owner disapperaed.
>
> _____
>
> D^2
>
> Dean Davis (N7XG)
> Alpine Software
> www.alpinesoft.com
>
>
> ---
> *From*: "Doug Jones" <limax@...>
> *Sent*: Thursday, April 07, 2011 11:37 AM
> *To*: mmr40owngrp@yahoogroups.com
> *Subject*: Re: [mmr40owngrp] New group formed for the MMR40
>
> How does changing to a new group on Yahoo bring a group out of
> dormancy? Just curious.
>
> Doug
> N6LMX
>
> On 4/7/2011 10:10 AM, Dean wrote:
>
>> Hi,
>>
>> I have just created a new group for the MMR40 users.
>>
>> Please join:
>>
>> mmr40@yahoogroups.com <mailto:mmr40%40yahoogroups.com>
>>
>> I will try and migrate all of the content off the older dormant group.
>>
>> Dean, N7XG
>>

>
>

734. RE: [mmr40owngrp] New group formed for the MMR40

Yahoo group: mmr40owngrp
Date: 2011-04-07 22:10:34 UTC
From: Charles Smith
Topic: 730 Message: 734

i couldn't find the group ... i will certainly join when i find it ... thanks! 72/73 de charles ai4ot

To: mmr40owngrp@yahoogroups.com
From: dean@...
Date: Thu, 7 Apr 2011 17:10:25 +0000
Subject: [mmr40owngrp] New group formed for the MMR40

Hi,

I have just created a new group for the MMR40 users.

Please join:

mmr40@yahoogroups.com

I will try and migrate all of the content off the older dormant group.

Dean, N7XG

735. Re: New group formed for the MMR40

Yahoo group: mmr40owngrp
Date: 2011-04-08 13:52:04 UTC
From: wa5pse
Topic: 730 Message: 735

When the creator/moderator went away, no new members were able to be processed into the group...For that matter, nothing requiring moderator approval could take place!
Mike, wa5pse

--- In mmr40owngrp@yahoogroups.com, Doug Jones <limax@...> wrote:
>
> How does changing to a new group on Yahoo bring a group out of
> dormancy? Just curious.
>
> Doug
> N6LMX
>
> On 4/7/2011 10:10 AM, Dean wrote:
> >
> > Hi,
> >
> > I have just created a new group for the MMR40 users.
> >
> > Please join:
> >
> > mmr40@yahoogroups.com <mailto:mmr40%40yahoogroups.com>
> >
> > I will try and migrate all of the content off the older dormant group.
> >
> > Dean, N7XG
> >
> >
>

736. Re: New group formed for the MMR40

Yahoo group: mmr40owngrp
Date: 2011-04-08 15:11:12 UTC
From: wb0smx
Topic: 730 Message: 736

I think the link for the new group was incorrect.
Maybe it should be:
http://groups.yahoo.com/group/mmr40/

I was just able to join using this link. Of course, just me and Dean are there so far...

--- In mmr40owngrp@yahoogroups.com, Charles Smith <ai4ot@...> wrote:
>
>
>
>
>
>
>
>
> i couldn't find the group ... i will certainly join when i find it ... thanks! 72/73 de charles ai4ot
>
> To: mmr40owngrp@yahoogroups.com
> From: dean@...
> Date: Thu, 7 Apr 2011 17:10:25 +0000
> Subject: [mmr40owngrp] New group formed for the MMR40
>
>
>
>
>
>
>
> Hi,
>
> I have just created a new group for the MMR40 users.
>
> Please join:
>
> mmr40@yahoogroups.com
>
> I will try and migrate all of the content off the older dormant group.
>
> Dean, N7XG
>

737. free handbook radio F6BCU 2011

Yahoo group: mmr40owngrp
Date: 2011-06-27 05:51:24 UTC
From: F6BCU
Topic: 737 Message: 737

The Big 'French Handbook' - free to download
New 2011 edition - available since June 25 2011.

Now, it is possible to download free the 'French Handbook' accomplished by F6BCU.

Numerous technical articles are at your disposal, ideal for home-brew.

You can download compact disk free on the site of Onlineradio (exclusive).
http://communaute.onlineradio.fr/files/file/
162-handbook-de-la-ligne-bleue/ - for download (540 Mo)

Jean-Nicolas
http://www.onlineradio.fr

738. Re: free handbook radio F6BCU 2011

Yahoo group: mmr40owngrp
Date: 2011-06-28 02:16:47 UTC
From: ohwenzelph
Topic: 737 Message: 738

can it be gotten in english?

tnx
jerry aa1of

739. Free download the radioamateur Handbook 2012 by F6BCU

Yahoo group: mmr40owngrp
Date: 2011-10-16 12:26:00 UTC
From: F6BCU
Topic: 739 Message: 739

god day to all

free download the radio amateur handbook by F6BCU 580 MO

2100 pages 225 articles schématic, QRP, antenna, color photo

10GHz to 160m

http://communaute.onlineradio.fr/files/file/162-handbook-de-la-ligne-bleue/

73

F6BCU

740. Tune-up Questions

Yahoo group: mmr40owngrp
Date: 2013-04-17 00:26:52 UTC
From: kc8wzb
Topic: 740 Message: 740

I see that this group isn't used much. I hope that I can get some help with getting my MMR40 finished. I started it years ago. At the time, I didn't have another SW or HF rig to tune it so I put it a side until I could get one. Well, it was soon forgotten until the other night when I had the chance to get another MMR-40 kit. So, I dug up my old kit that I began assembling and remember that I left off on the tune-up section.

So, now I'm on step:
"You should find the oscillator signal at about 3 MHz. If the frequency is much higher than 3 MHz, you
likely have the feedback and main winding reversed on the board. The frequency can be fine tuned by
changing the spacing of the wire on the L2 toroid. Moving the turns closer together will decrease the
frequency, while spreading them apart will increase the frequency. Adjust the turns spacing on L2 so
that the oscillator frequency is slightly below 3 MHz. This will ensure you can not tune below the 40 M
band allocation. If you can't get up to 3 MHz by changing the spacing of the turns on L2, you likely have
a few too many turns on the PTO coil and have to remove a few. Do this one turn at a time."

I'm using an Icom 706MKII as my HF receiver. The problem is that I don't here the oscillator anywhere. Maybe someone that knows this kit better than I may have a suggestion on where I should begin looking to fix this issue. I remember thinking that I had all the parts correctly located on the board. I also remember spending lots of time making sure that the inductors were wound correctly. Maybe I missed something. Short of pitching this board in the trash and starting my new kit, anyone have a suggestion where I should start looking? It would be nice to get this rig working. Shoot, it would be nice to see some activity on this discussion list again. So, please post your suggestions to the list. Who knows, you suggestion to me might help another ham one day.

Thanks in advance.

73,
Eric
k8ohz

741. Building an MMR40

Yahoo group: mmr40owngrp
Date: 2017-01-31 19:49:01 UTC
From: Steven Read
Topic: 741 Message: 741

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } A while back I picked up an unassembled MMR40 & am looking for an "elmer" in case I get stuck. I am 65 my last kit was a Heathkit GR-81 (no picking on the old guy with the radio that has 3 "night lights" inside.) I know there have been a lot of changes in past 50 years but have gone through a PDF that I believe goes with this version of the kit.
Steven Read - Dublin, IN

742. RE: [mmr40owngrp] Building an MMR40

Yahoo group: mmr40owngrp
Date: 2017-01-31 20:21:38 UTC
From: fhump@...
Topic: 741 Message: 742

I'm in Wisconsin Milwaukee area but would be happy to answer
questions it that would help.
73
Frank KA9FZR

---- Original Message ----
From: mmr40owngrp@yahoogroups.com
To: mmr40owngrp@yahoogroups.com
Subject: [mmr40owngrp] Building an MMR40
Date: Tue, 31 Jan 2017 19:49:01 +0000 (UTC)

> blockquote, div.yahoo_quoted { margin-left: 0 !important;
>border-left:1px #715FFA solid !important; padding-left:1ex
>!important; background-color:white !important; } A while back I
>picked up an unassembled MMR40 & am looking for an "elmer" in case I
>get stuck. I am 65 my last kit was a Heathkit GR-81 (no picking on
>the old guy with the radio that has 3 "night lights" inside.) I know
>there have been a lot of changes in past 50 years but have gone
>through a PDF that I believe goes with this version of the kit.
>Steven Read - Dublin, IN